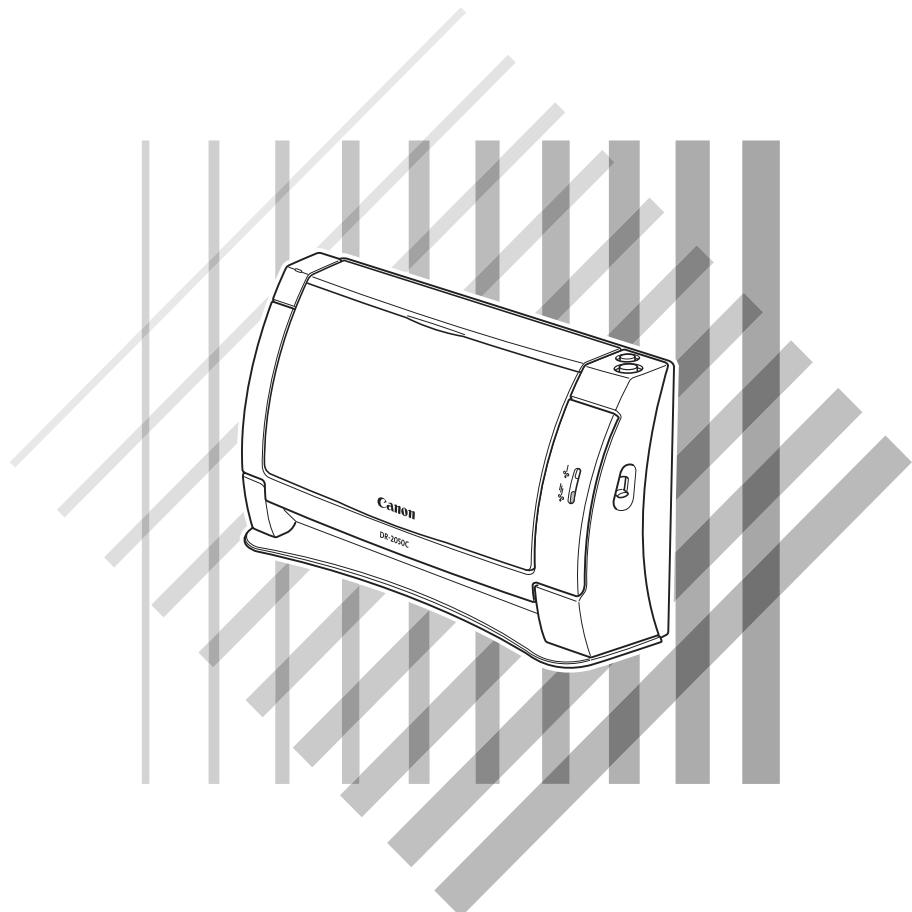


Canon

Document Scanner **DR-2050C**

Startup Manual



Please read this manual before operating this unit. After you finish reading this manual, store it in a safe place for future reference.

International ENERGY STAR® Office Equipment Program



As an ENERGY STAR® Partner, Canon Electronics Inc., has determined that this machine meets the ENERGY STAR® Program guidelines for energy efficiency.

The International ENERGY STAR® Office Equipment Program is an international program that promotes energy saving through the use of computers and other office equipment. The program backs the development and dissemination of products with functions that effectively reduce energy consumption. It is an open system in which business proprietors can participate voluntarily. The targeted products are office equipment, such as computers, monitors, printers, fax, machine, copiers, and scanners. The standards and logos are uniform among participating nations.

Trademarks

- Canon and the Canon logo are trademark of Canon Inc.
- Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and other countries.
- ISIS is a trademark of Pixel Translations, a division of Captiva Software Corporation, in the United States.
- Intel and Pentium are registered trademarks of Intel Corporation.
- ENERGY STAR® is a U.S. registered mark.
- Adobe is the registered trademark of Adobe Systems Incorporated in the United States and/or other countries.
- Adaptec is registered trademark of Adaptec Inc.
- Other product and company names here in may be the trademarks of their respective owners.

Copyright

Copyright 2005 by CANON ELECTRONICS INC. All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of CANON ELECTRONICS INC.

Disclaimers

The information in this document is subject to change without notice.

CANON ELECTRONICS INC. MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, EITHER EXPRESS OR IMPLIED, EXPECT AS PROVIDED HERE IN, INCLUDING WITHOUT LIMITATION, THERE OF, WARRANTIES AS TO MARKETABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OF USE OR AGAINST INFRINGEMENT OF ANY PATENT. CANON ELECTRONICS INC. SHALL NOT BE LIABLE FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM THE USE OF THIS MATERIAL.

READ CAREFULLY BEFORE OPENING THE SEALED DISK PACKAGE

CANON SOFTWARE LICENSE AGREEMENT

IMPORTANT-READ THIS AGREEMENT BEFORE OPENING THE SEALED DISK PACKAGE! BY OPENING THE SEALED DISK PACKAGE, YOU ARE DEEMED TO AGREE TO BE BOUND BY THIS AGREEMENT.

This legal document is a license agreement between you and Canon Electronics Inc. ("Canon"). BY OPENING THE SEALED DISK PACKAGE, YOU ARE DEEMED TO AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT OPEN THE SEALED DISK PACKAGE AND PROMPTLY RETURN THE CANON SCANNER, THE DISK PACKAGE CONTAINING SCANNER DRIVER SOFTWARE PROGRAMS AND/OR SCANNER UTILITY SOFTWARE PROGRAM PROPRIETARY TO CANON OR ITS LICENSOR (THE "SOFTWARE") AND THE ACCOMPANYING DOCUMENTATION AND OTHER ITEMS TO THE PLACE WHERE YOU OBTAINED THEM FOR A REFUND BEFORE THEY ARE USED OR OPENED OR UNPACKED.

In consideration of the right to use the SOFTWARE, you agree to abide by the terms and conditions of this Agreement.

1. GRANT OF LICENSE: Canon grants you the personal, non-exclusive right to use the SOFTWARE only on a single computer. You may physically transfer the SOFTWARE from one computer to another provided that the SOFTWARE is used on only one computer at any time.

You shall not assign, sublicense, sell, rent, lease, loan, convey or transfer to any third party, or send or bring the SOFTWARE out of the country where you originally obtain it to other countries without required authorization of applicable governments, or copy, duplicate, translate or convert to another programming language the SOFTWARE or accompanying documentation, except as expressly provided herein.

Except as expressly permitted under the applicable law, you shall not alter, modify, disassemble, decompile or otherwise reverse engineer the SOFTWARE or accompanying documentation and you also shall not have any third party do so.

2. BACK-UP COPY: You may make one copy of the SOFTWARE solely for a back-up purpose or copy the SOFTWARE onto the permanent storage device (e.g. a hard disk) of your computer and retain the original for a back-up purpose. Except as expressly permitted under the applicable law, any other copying of the SOFTWARE is a violation of this Agreement. You must reproduce and include the copyright notice on the back-up copy.

3. SUPPORT AND UPDATE: Canon, Canon's affiliate, their distributor or dealer is not responsible for maintaining or helping you to use the SOFTWARE. No updates, fixes or support will be made available for the SOFTWARE.

4. LIMITED WARRANTY AND DISCLAIMER OF INDEMNITY: Canon, Canon's affiliate, their distributor or dealer will not guarantee uninterrupted service, or absence or correction of errors. Therefore, the SOFTWARE is licensed on an "AS IS" basis without warranty of any kind. The diskette on which the SOFTWARE is recorded is warranted against defective material or workmanship under normal use for a period of ninety (90) days from the date you purchased the same as evidenced by a receipt or otherwise. The limited warranty does not apply if the failure of the diskette resulted from accident, abuse or misapplication of the SOFTWARE and shall not extend to anyone other than the original user of the SOFTWARE.

CANON, CANON'S AFFILIATE, THEIR DISTRIBUTOR OR DEALER DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SOFTWARE OR ACCOMPANYING DOCUMENTATION.

NEITHER CANON, CANON'S AFFILIATE, THEIR DISTRIBUTOR NOR DEALER IS LIABLE FOR ANY LOSS OR DAMAGE INCLUDING CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE SUCH AS LOSS OF PROFITS, EXPENSE OR INCONVENIENCE, WHATSOEVER CAUSED BY OR ARISING OUT OF THE SOFTWARE, ACCOMPANYING DOCUMENTATION OR THE USE THEREOF.

CANON, CANON'S AFFILIATE, THEIR DISTRIBUTOR OR DEALER SHALL HAVE NO OBLIGATION TO INDEMNIFY YOU AGAINST ANY CLAIM OR SUIT BROUGHT BY A THIRD PARTY ALLEGING THAT THE SOFTWARE, ACCOMPANYING DOCUMENTATION OR THE USE THEREOF INFRINGES ANY INTELLECTUAL PROPERTY OF SUCH THIRD PARTY.

THE ABOVE IS CANON'S ENTIRE LIABILITY AND YOUR EXCLUSIVE REMEDY IN CONNECTION WITH THE SOFTWARE AND ACCOMPANYING DOCUMENTATION.

5. TERM: This Agreement is effective upon opening the sealed disk package and remains in effect until terminated. You may terminate this Agreement by destroying the SOFTWARE and any copy thereof. This Agreement will also terminate if you fail to comply with any of the terms of this Agreement. In addition to Canon enforcing its respective legal rights, you must then promptly destroy the SOFTWARE and any copy thereof.

6. U.S. GOVERNMENT RESTRICTED RIGHTS NOTICE: The SOFTWARE is provided with RESTRICTED RIGHTS. Use, duplication or disclosure is subject to restrictions as set forth in either subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraph (c) (1) and (2) of the Commercial Computer Software Restricted Rights Clause at FAR 52.227-19, as applicable.

7. SEVERABILITY: In the event that provision of this Agreement is declared or found to be illegal by any court or tribunal of competent jurisdiction, such provision shall be null and void with respect to the jurisdiction of that court or tribunal and all the remaining provisions of this Agreement shall remain in full force and effect.

8. ACKNOWLEDGEMENT: BY OPENING THE SEALED DISK PACKAGE, YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTOOD IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. YOU ALSO AGREE THAT THIS AGREEMENT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF AGREEMENT BETWEEN YOU AND CANON CONCERNING THE SUBJECT MATTER HEREOF AND SUPERSEDES ALL PROPOSALS OR PRIOR AGREEMENTS, VERBAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN YOU AND CANON RELATING TO THE SUBJECT MATTER HEREOF. NO AMENDMENT TO THIS AGREEMENT SHALL BE EFFECTIVE UNLESS SIGNED BY A DULY AUTHORIZED REPRESENTATIVE OF CANON.

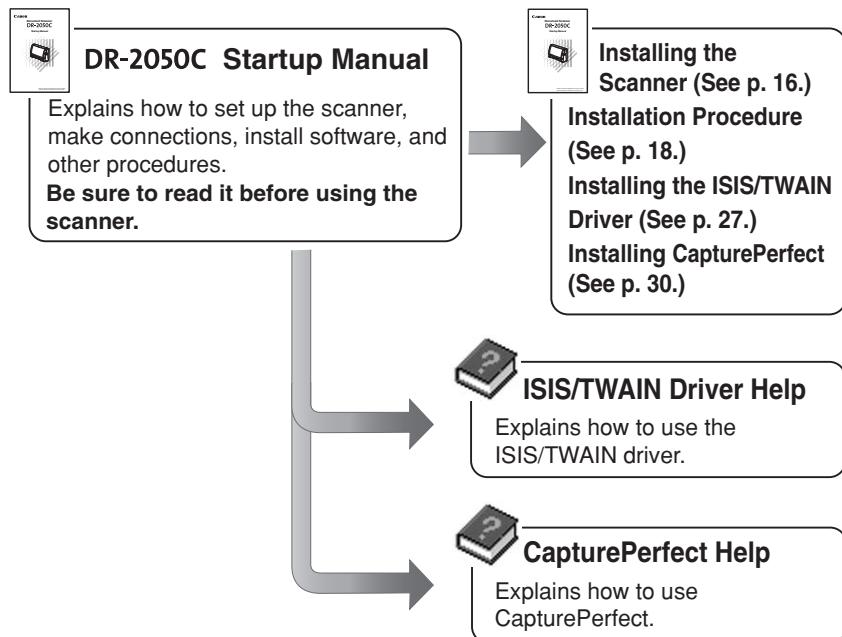
Should you have any questions concerning this Agreement, or if you desire to contact Canon for any reason, please write to Canon's local affiliate.

INTRODUCTION

Thank you for purchasing the Canon DR-2050C scanner. Please read this manual thoroughly before using the machine to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

Manuals for the Scanner

The DR-2050C scanner has a Startup Manual (this manual) and online help. Please refer to the Startup Manual regarding the handling of the scanner, such as installation of software and setting up the scanner. The online help explains how to use the ISIS/TWAIN driver and the enclosed software, CapturePerfect.



Conventions

This manual uses the following symbols and indications.

Before you start reading this manual, read the following and familiarize yourself with their meanings.

WARNING

Indicates a warning concerning operations that may lead to death or injury to persons if not performed correctly. In order to use the machine safely, always pay attention to these warnings.

CAUTION

Indicates a caution concerning operations that may lead to injury to persons, or damage to property if not performed correctly. In order to use the machine safely, always pay attention to these cautions.

IMPORTANT

Indicates operational requirements and restrictions. Be sure to read these items carefully in order to operate the machine correctly, and to avoid damage to the machine.

Note

Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.

Contents

INTRODUCTION	1
Manuals for the Scanner	1
Conventions	2
Before Using the Scanner	4
Safe Operation	4
Installation Location	4
Power	5
Moving the Scanner	5
Normal Handling	6
Disposal	7
Features of the DR-2050C	8
Checking the Packing List	10
Removing the Protective Packing Materials	12
Names and Functions of Parts	14
Installing the Scanner	16
Installation Requirements	16
Installing Procedure	18
Interface Cards	19
Connecting the Power Cord	20
Connecting the Scanner to Your PC	21
Turning the Power ON/OFF	22
Turning the Power ON	22
Recognizing the Scanner	23
Turning the Power OFF	25
Installing the Software	26
Installing the ISIS/TWAIN Driver	27
Installing CapturePerfect	30
Uninstalling Software	33
Using the Software	36
Using the ISIS/TWAIN Driver	36
Using CapturePerfect	37
Starting CapturePerfect	37
Starting CapturePerfect with the Event Function	40
Confirming Scanner Event	40
Using the Scanner	42
Documents	42
Preparing the Trays	43
Setting Up the Document Feed Tray	43
Using the Document Guide Adapter	44
Using the Feed Extension Plate	44
Placing a Document for Scanning	45
How to Feed with the Page Separation Mode	45
How to Feed with the Bypass Mode	48
Clearing a Paper Jam	50
Other Functions	52
Scanning Folio (Folded Document)	52
Regular Maintenance	53
Cleaning the Scanner	53
Cleaning Inside the Scanner	53
Cleaning the Sensor Glass and the Rollers	54
Cleaning the Metal Rollers	56
Removing and Attaching the Rollers	57
Roller Replacement Cycle	57
Resetting the Counter	58
Removing and Attaching the Roller	60
Removing and Attaching the Retard Roller	64
Troubleshooting	67
Specifications	73
Index	76

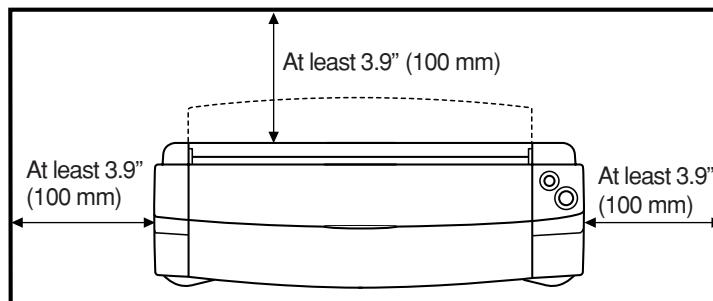
Before Using the Scanner

Safe Operation

In order to ensure safe operation, be certain to read the cautions described below.

Installation Location

The performance of this scanner is affected by the environment in which it is installed. Make sure that the location where the scanner is installed meets the following environmental requirements:



- Provide adequate space around the scanner for operation and maintenance, and for ventilation.
- Provide adequate space behind the scanner in order to eject scanned documents to the back of the scanner.
- Avoid locations exposed to direct sunlight. If the scanner must be placed in such a spot, hang a heavy curtain, or similar object to shade the scanner.
- Avoid dusty locations. Dust can get inside of the scanner and cause problems.
- Avoid warm or humid locations, such as in the vicinity of a water faucet, water heater, or humidifier, and avoid locations where the fumes from ammonia, paint thinner, or other volatile chemicals may be present.
- Avoid unstable surfaces and locations subject to vibration.
- Avoid locations that are subject to rapid temperature changes. Condensation inside of the scanner can result in inferior image quality. Use this scanner under the following environmental conditions:

Temperature: 10°C to 32.5°C (50°F to 90.5°F)

Humidity: 20% to 80% RH

- Avoid locating the scanner near equipment that generates electromagnetic fields, including speakers, televisions, and radios.

Power

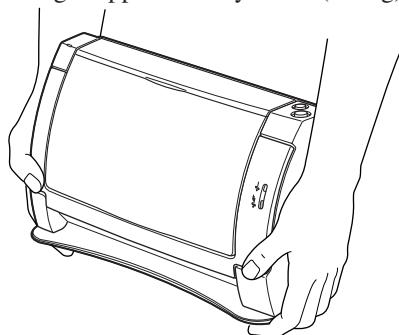
- Connect only to a power outlet of the rated voltage and power supply frequency. (either 120 V, 60 Hz or 220-240 V, 50/60 Hz depending on your region).
- Do not connect to power outlets with other electrical devices. Also, when using an extension cord, make sure that the extension cord is rated for the current requirements of the scanner.
- Disassembling and/or reassembling the AC adapter is extremely dangerous and should not be attempted under any circumstances.
- Do not place heavy objects on the AC adapter or Power Cord. Do not place the adapter or cords in an area where they are likely to be stepped on.
- Do not use the Power Cord while it is bundled.
- Never pull directly on the Power Cord. To remove the plug from the outlet, grasp the plug directly and remove it from the outlet.
- Keep the area around the power plug clear of articles so that the power plug can be disconnected in an emergency.
- Use only the AC adapter provided with the product. Do not use the scanner's AC adapter with any other product.

Model: MG1-3607

- If you have any questions about the AC adapter, contact your local authorized Canon dealer or service representative for further information.

Moving the Scanner

- When moving the scanner, always hold it with both hands to avoid dropping it. The scanner weighs approximately 5.0 lb (2.5 kg).



- Make sure to disconnect the interface cable and Power Cord. If the scanner is transported with these items plugged in, the plugs and connectors may be damaged due to physical shock.

Normal Handling

WARNING

To avoid fire and electric shock, always observe the following warnings when using this scanner.

- Do not place flammable chemicals, such as alcohol or paint thinner, near the scanner.
- Do not cut, damage, or modify the Power Cord. Do not place heavy objects on the Power Cord, do not pull on the Power Cord, and do not bend the Power Cord sharply.
- Do not plug in or unplug the Power Cord with wet hands.
- Do not use multioutlet adapters to connect multiple devices to one outlet.
- Do not tie up or bundle the Power Cord. Push the plug in as far as it will go when plugging in the Power Cord.
- Only use the Power Cord that was provided with this scanner.
- Do not attempt to disassemble or modify this scanner.
- Never try to take the AC adaptor apart or modify it in any way. Doing so is very dangerous.
- Do not use flammable sprays near this scanner.
- Always turn the scanner OFF and unplug the Power Cord before cleaning this scanner.
- To clean this scanner, dampen a cloth in a mild detergent solution and then wring the cloth out thoroughly. Do not use flammable liquids to clean the scanner, including alcohol, benzene, or paint thinner.
- If the scanner ever makes a strange noise, emits smoke or a strange odor, becomes hot, or if the scanner does not operate at all even though the power is ON, immediately turn the scanner OFF and unplug the Power Cord. Contact your local authorized Canon dealer or service representative to have the scanner serviced.
- Do not drop, kick, or otherwise strike the scanner. If the scanner does somehow become damaged, immediately turn the scanner OFF and unplug the Power Cord. Contact your local authorized Canon dealer or service representative to have the scanner serviced.
- Always turn the scanner OFF and unplug the Power Cord before moving the scanner.

CAUTION

- Do not set the scanner up on a wobbly platform, a sloped surface, or any other type of unstable location. Do not set up the scanner in a location that is subject to vibration. The scanner could injure someone if it falls or tips over.

- Do not block the ventilation openings. Doing so could cause the scanner to overheat, creating a risk of fire.
- Do not place paper clips, staples, necklaces, or any other metallic objects on top of the scanner. Liquids or small metallic objects that get inside of the scanner create a risk of fire or electrical shock. If such foreign matter does get inside of the scanner, unplug the Power Cord immediately, and then contact your local authorized Canon dealer or service representative for assistance.
- Do not set up the scanner in a dusty or humid location. Doing so creates a risk of fire or electrical shock.
- Do not place objects on top of the scanner. The object could injure someone if it falls or tips over.
- To prevent any risk of fire or electrical shock, be sure that the power source meets the power requirements of the scanner.
- When unplugging the Power Cord, always grasp the plug. Pulling on the cord itself could expose or break the wires in the Power Cord, damaging the cord and creating a risk of fire or electrical shock.
- To allow you to easily unplug the Power Cord at any time, do not place other objects around the power outlet. Such obstacles could prevent you from unplugging the Power Cord quickly in an emergency.
- Do not spill liquids or flammable chemicals (such as alcohol, paint thinner, or benzene) on the scanner. Doing so creates a risk of fire or electrical shock.
- If the scanner will not be used for an extended period of time, unplug the Power Cord for safety's sake.
- When operating this scanner, avoid wearing loose fitting clothing, dangling jewelry, or other material that could get pulled into the scanner. Injury could result. Be especially careful if you are wearing a necktie or have long hair. In the event that some article or clothing does get caught in the scanner, turn the power OFF immediately.
- Be careful when placing paper in the scanner and when removing jammed paper. It is possible to cut your hand on the edge of a sheet of paper.

Disposal

- When disposing of this scanner, be sure to follow all local ordinances and laws or consult with the retailer who sold you the scanner.

Features of the DR-2050C

The main features of the DR-2050C scanner are listed below.

■ Compact Configuration

The scanner has a very compact configuration, measuring only 11.7" (298 mm) (W) x 7.7" (197 mm) (H) x 3.9" (100 mm) (D). The small footprint of this standup vertical scanner saves space.

■ Fast Document Feeding

The scanner can scan a maximum of 20 documents per minute in a range of sizes from business cards to LTR/A4 size. (Scanning conditions: Black and white, LTR/A4 size portrait, two sided, 200 dpi.)

■ USB 2.0 Interface

Connecting to a computer is done with Hi-Speed USB 2.0 protocol.

■ Color/Grayscale Support

Documents can be scanned in 24-bit color or 256-level grayscale.

■ Supports a Variety of Scanning Modes

The scanner supports the following scanning modes, depending on the document type:

- single-sided/double-sided mode
- Single sheet/dual feeding path

■ Paper Size Detection

The scanner automatically detects the size of a scanned document and eliminates any unnecessary space around the edges of the image when storing it, even when storing a document of irregular size.

■ Folio Scan

A folio (folded in half) document can be set for scanning as it is, and the scanned images of both sides are combined as a single image. (See p. 52.)

■ Deskew

The Deskew function automatically straightens an image if the document was loaded askew.

■ Character Orientation Detector

Identifies the orientation of characters in a document, and rotates the image so the orientation of the scanned characters is straight.

■ Text Enhancement

The scanner is equipped with a Text Enhancement mode that allows you to clearly scan text printed on a dark background, and text that is written in faint pencil.

■ Dropout Color

The scanner is equipped with a Dropout Color function that allows you to specify a color for the scanner to omit from scanned images.

■ Skip Blank Page Function

The scanner is equipped with a Skip Blank Page function that allows it to scan a document regardless of whether every document is double-sided or single-sided.

■ Prescan Function

The scanner is equipped with a Prescan function that allows you to adjust the contrast and brightness of a prescanned image and then send the adjusted image to the application software, without needing to scan the document again.

■ Auto Start

The scanner is equipped with an Auto Start function that automatically initiates scanning when a document is placed in the Document Feed Tray.

■ Compatible with Carbonless Duplicating Paper

The scanner is able to scan carbonless duplicating paper.

■ Power Saving Feature

The scanner has a power saving feature that puts the scanner in low power mode after it has been idle for a certain period of time.

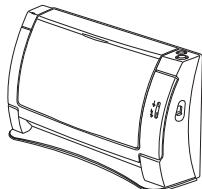


Note

Some functions may not be available depending on the software you are using.

Checking the Packing List

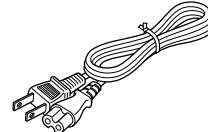
The contents of the carton in which this scanner is shipped are described below. If anything is missing or damaged, contact your local authorized Canon dealer or service representative.



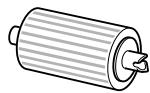
DR-2050C Scanner



AC Adapter



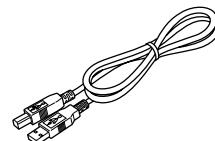
Power Cord



Feed Roller



Document Guide Adapter



USB Interface Cable



DR-2050C/2080C
Setup Disc
(CD-ROM)



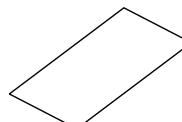
Adobe Acrobat
Setup Disc (CD-ROM)



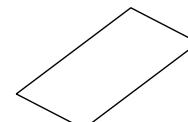
Startup Manual
(This Manual)



Adjustment Sheet
(Shading Sheet)



Warranty Card

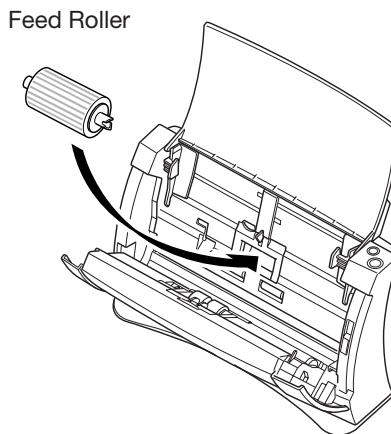


Registration Card
(U.S.A. and Canada only)



Note

- Remove all of the protective tape and protective sheets from the DR-2050C. (See “Removing the protective packing materials,” on p. 12.)
- To use the “Feed Roller” install it on the DR-2050C. Refer to “Removing and Attaching the Feed Roller” (see p. 60) for information about installing the roller.

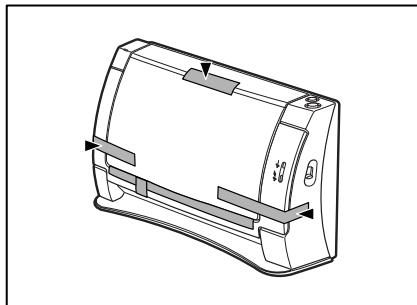


- The DR-2050C/2080C Setup Disc is in the Startup Manual (this manual).
- The Adjustment Sheet (Shading Sheet) is inserted at the back of this manual. Keep it in a safe place where it will not become lost.
- Items included in this package may change without notice.
- You need to keep the machine's packaging and packing materials for storing or transporting the machine.
- The Power Cord varies according to country of purchase.

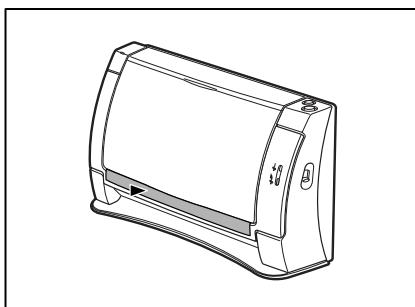
Removing the Protective Packing Materials

Remove all of the protective packing materials before using the scanner.

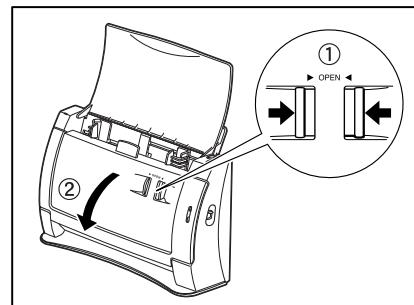
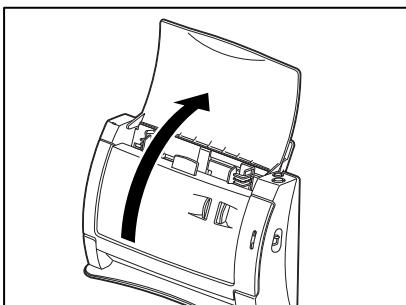
- 1 Remove the protective tape (indicated by the ▼) from the scanner.



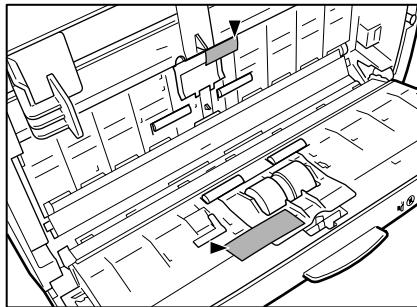
- 2 Remove the protective sheet between the Document Feed Tray and the scanner.



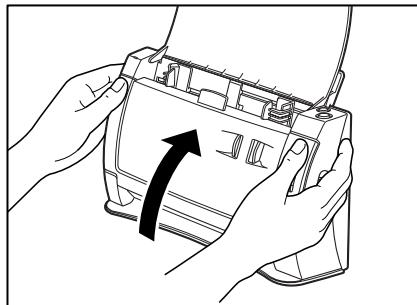
- 3 Open the Document Feed Tray. Pressing the OPEN Knob from both sides (①), pull the Front Unit forward to open it (②).



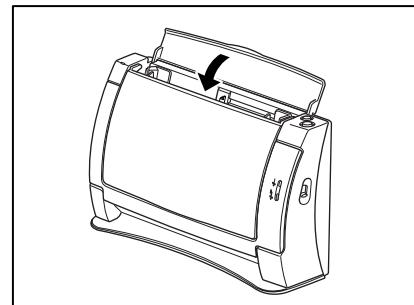
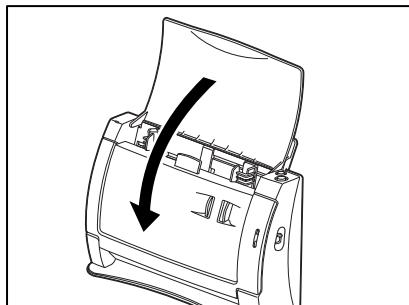
4 Remove the protective tape (indicated by ▼) and protective sheet.



5 Close the Upper Unit slowly. Be sure that the Upper Unit is completely closed by pushing on both edges with both hands until you hear a click.



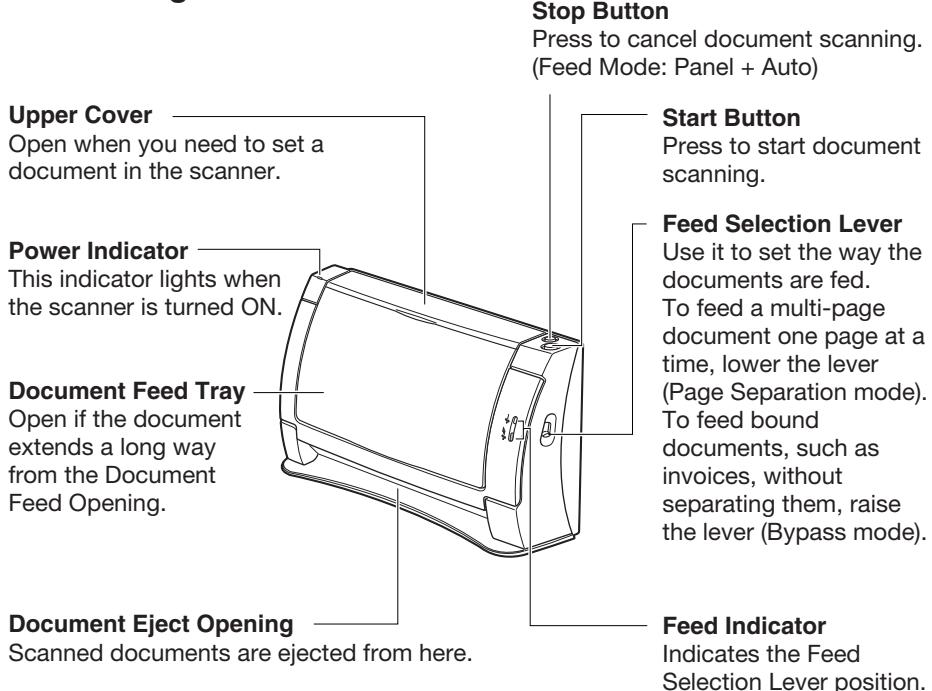
6 Close the Document Feed Tray and Upper Cover.



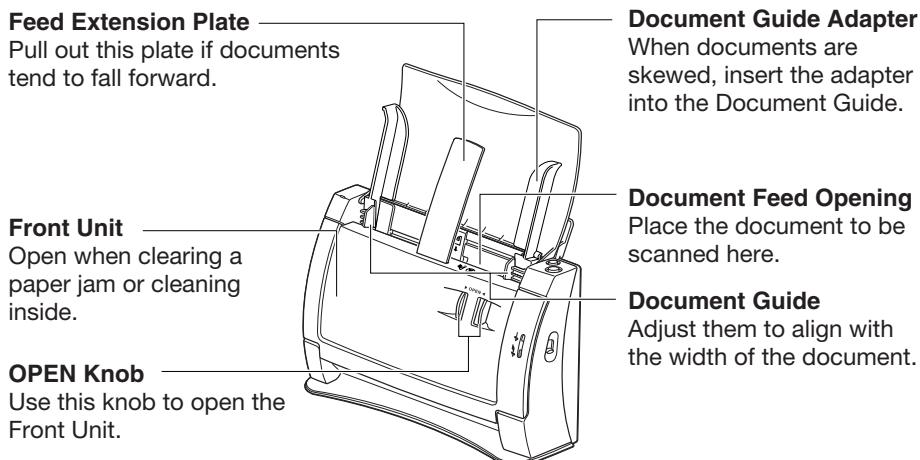
Names and Functions of Parts

This section explains the name and function of each part. Familiarize yourself with the parts before connecting the scanner.

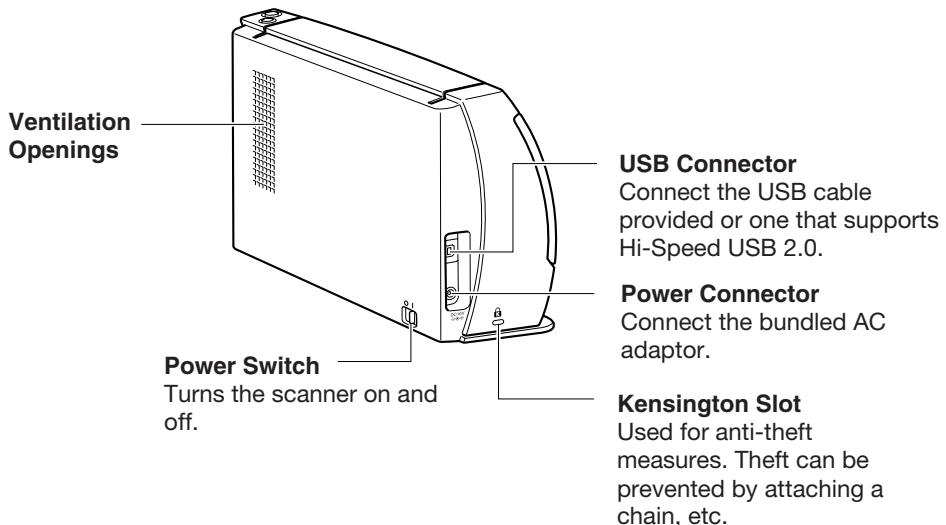
■ Front/Right Side



■ Front (Upper Cover and Document Feed Tray open)



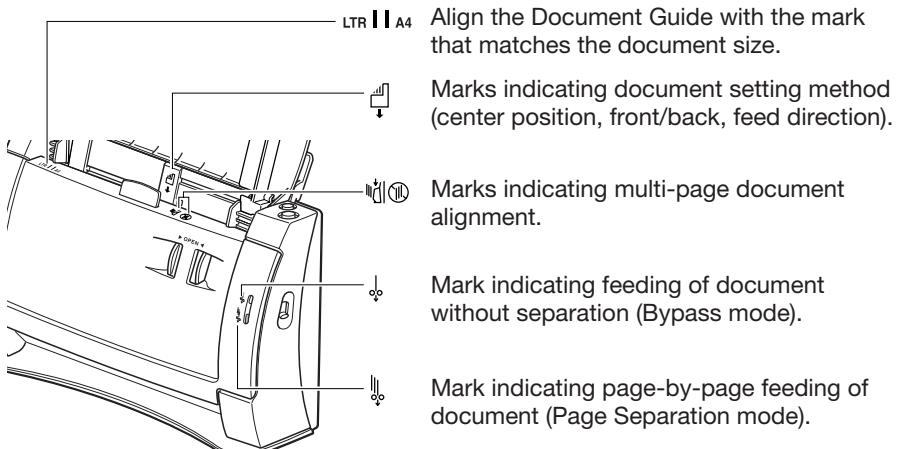
■ Back/Left Side



⚠ CAUTION

Make sure that Ventilation Openings are not blocked. Blocked openings can cause internal heat build up, creating the risk of fire.

■ Conventions



Installing the Scanner

Installation Requirements

In order to use the DR-2050C, your computer must satisfy the following system requirements:

- A computer that meets the following specifications:
 - CPU: Celeron 733 Hz or higher
 - Memory: 256 MB or more
 - Hard disk: 400 MB or more available space
 - CD-ROM drive
 - Hi-Speed USB 2.0 interface
 - Monitor: Resolution of 1024 x 768 (XGA) or better recommended
- The Hi-Speed USB 2.0 interface is standard equipment on some computers and is supported on the scanner with the Hi-Speed USB 2.0 interface card (See "Interface Cards," on p. 20.)
- One of the following operating systems:
 - Microsoft Windows 98SE
 - Microsoft Windows Me
 - Microsoft Windows 2000 Professional SP3 or later
 - Microsoft Windows XP Professional SP1 or later
 - Microsoft Windows XP Home Edition SP1 or later
- ISIS compatible or TWAIN compatible application software that runs on your operating system



IMPORTANT

- Use the most recently available USB 2.0 driver when using the DR-2050C. Contact your local authorized Canon dealer or service representative for more detailed information.
- If the Hi-Speed USB 2.0 interface is standard equipment on your computer, then all computer operations are not guaranteed. If the standard Hi-Speed USB 2.0 interface does not operate normally sometimes, then use the recommended Hi-Speed USB 2.0 interface card. Contact your local authorized Canon dealer or service representative for more detailed information.
- The USB cable you are using should be the one originally bundled with the scanner or a Hi-Speed USB 2.0 compatible cable.
- If the CPU, memory, interface card, and other specifications do not satisfy those recommended, the scanning speed may be greatly reduced and transmission may take a long time.
- Even if the computer satisfies the recommended specifications, the scanning speed may be slow depending on the scan settings.

- Make sure that enough virtual memory is set on your Windows system. Virtual memory settings vary according to the Windows system. For more information, refer to the Windows manual or the online help.
- Depending on the application software that you are using, the device driver provided may not operate, or you may not be able to use the functions described in this guide.
- Make sure that the device driver and application software that you will be using are compatible with your PC, the system configuration, and the type of interface card that you are using.
- The ISIS/TWAIN driver provided with the scanner is not necessarily compatible with all ISIS compatible or TWAIN compatible application software. For details, contact your local authorized Canon dealer or service representative.

Installation Procedure

The procedure for installing the scanner is outlined below. (For a detailed outline of this procedure, see “Connecting the Scanner to Your PC,” on p. 21.)

1. Check the interface card in your computer.
(See “Interface Cards,” on p. 19.)
2. Connect the Power Cord to the scanner.
(See “Connecting the Power Cord,” on p. 20.)
3. Connect the scanner to the PC.
(See “Connecting the Scanner to Your PC,” on p. 21.)
4. Turn ON the scanner.
(See “Turning the Power ON,” on p. 22.)
5. Let the PC recognize the Scanner.
(See “Recognizing the Scanner,” on p. 23.)
6. Turn the scanner OFF.
(See “Turning the Power OFF,” on p. 25.)

Interface Cards

The recommended USB 2.0 interface card for this machine is noted below.

Recommended USB 2.0 Interface Cards

(for PCI Bus)

Manufacturer: Adaptec
Models: USB 2 connect 2000LP (AUA-2000)
USB 2 connect 3100 (AUA-3100LP)
USB 2 connect 5100 (AUA-5100)

(for Card Bus)

Manufacturer: Adaptec
Models: USB 2 connect for Notebooks (AUA-1420)



IMPORTANT

- Follow the instructions in your computer's and the USB 2.0 interface card's manuals to install the USB 2.0 interface card into your computer.
- Use the most recent version of the USB 2.0 driver provided by Microsoft.



Note

If the USB 2.0 interface is not compatible with Hi-Speed USB 2.0, scanning speed is reduced.

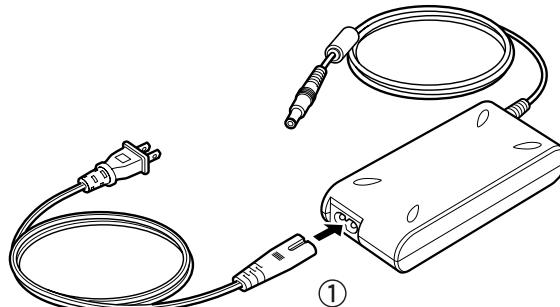
Connecting the Power Cord

Perform the following steps to connect the Power Cord.

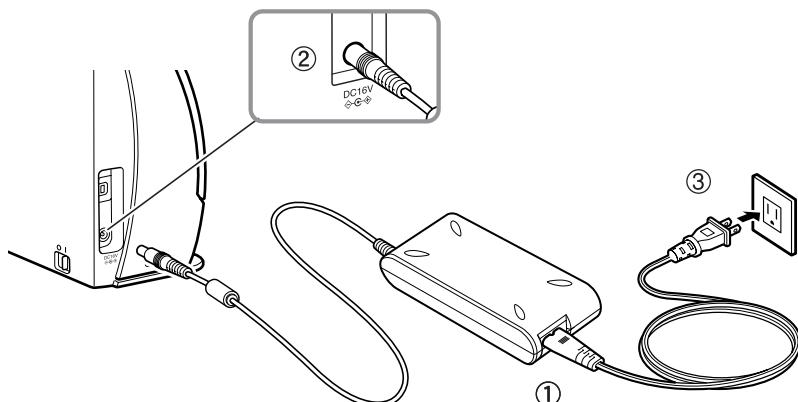
⚠ WARNING

- Be sure to use the Power Cord and AC adaptor provided with the scanner.
- Be sure the scanner is turned OFF when performing this operation.

1 Connect the bundled Power Cord ① to the AC adaptor.



2 Plug the AC adaptor Power Cord into the power connector (②) on the left side of the scanner, and plug the power plug into a power outlet (③).



Connecting the Scanner to Your PC

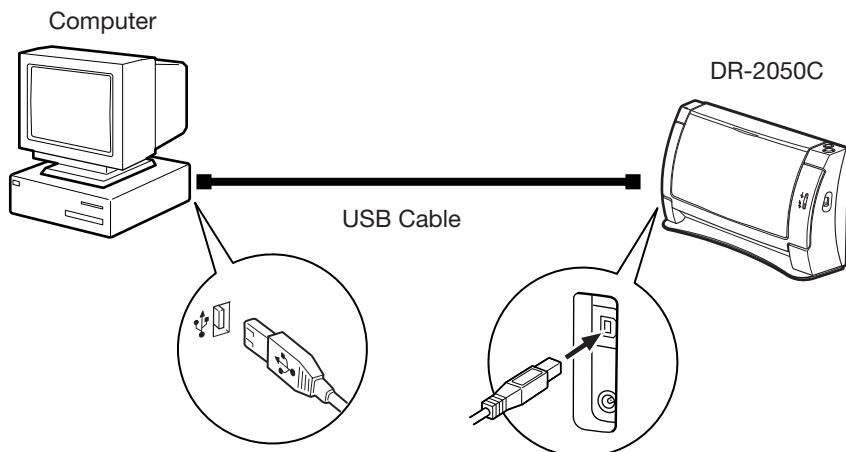
Connecting the scanner to a computer using a USB connection.

IMPORTANT

- When the application is running, do not turn the scanner OFF or unplug the interface cable.
- Do not connect multiple DR-2050C scanners to one (1) computer.

USB Interface Connection

- Be sure to use the USB cable bundled with the scanner or a Hi-Speed USB 2.0 compatible cable.
- When using a USB extension card that supports Hi-Speed USB 2.0, be sure to choose one verified for use with the scanner. (See p. 19.)



IMPORTANT

When using a USB hub, be sure to use one compatible with USB 2.0.

Note

- The DR-2050C passed the Hi-Speed USB 2.0 certification test. However, when you use the scanner with a personal computer equipped with USB 2.0 as standard, the scanner may not always operate normally.
- If the interface is not Hi-Speed USB 2.0 compatible, the scanning speed will slow down.

Turning the Power ON/OFF

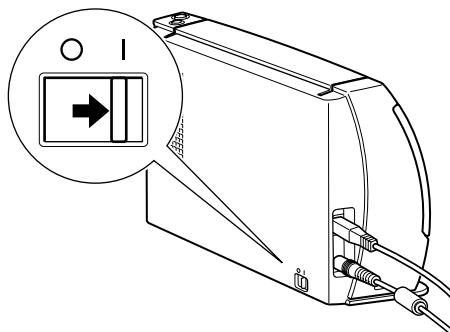
Follow the procedures described below when turning the power ON or OFF.

Turning the Power ON

1 Turn ON the scanner.

The power switch is on the right side of the scanner.

Push the power switch to turn ON the scanner. The power lamp lights green when the power is ON.



2 Turn ON the PC.

⚠ WARNING

If the scanner ever makes a strange noise, emits smoke or a strange odor, becomes hot, or if the scanner does not operate at all even though the power is ON, immediately turn the scanner OFF and unplug the Power Cord. Contact your local authorized Canon dealer or service representative to have the scanner serviced.

3 Log on to Windows.

⚠ IMPORTANT

If you are using Windows 2000 Professional or Windows XP, be sure to log on as a user with administrator privileges.

Recognizing the Scanner

When the computer recognizes the scanner, Windows Plug And Play displays the scanner driver's installation screen. Follow the instructions that appear on the screen to install the driver.

- If you are using Windows 98SE, the [Add New Hardware Wizard] dialog box appears.
 1. Click the [Next] button.
 2. Select [Search for the best driver for your device. (Recommended)], and then click the [Next] button.
 3. Insert the setup disc into the computer's CD-ROM drive.
 4. Select [Specify a location], enter "D:\INF" (assuming that "D" is the letter assigned to your CD-ROM drive), and then click the [Next] button.
 5. Click the [Next] button.
 6. Click the [Finish] button.
- If you are using Windows Me, the [Add New Hardware Wizard] dialog box appears.
 1. Select [Specify the location of the driver (Advanced)], and then click the [Next] button.
 2. Insert the setup disc into the computer's CD-ROM drive.
 3. Select [Search for the best driver for your device. (Recommended)], and then select [Specify a location]. Enter "D:\INF" (assuming that "D" is the letter assigned to your CD-ROM drive), and then click the [Next] button.
 4. Click the [Next] button.
 5. Click the [Finish] button.
- If you are using Windows 2000 Professional, the [Found New Hardware Wizard] dialog box appears.
 1. Click the [Next] button to proceed to the Install Hardware Device Drivers screen.
 2. Select [Search for a suitable driver for my device (Recommended)], and then click the [Next] button to proceed to the Locate Driver Files screen.
 3. Select [Specify a location], and then click the [Next] button.
 4. Insert the setup disc into the computer's CD-ROM drive.
 5. Enter "D:\INF" (assuming that "D" is the letter assigned to your CD-ROM drive), and then click the [OK] button.
 6. On the Driver Files Search Results screen, click the [Next] button.
 7. If the message "Digital Signature Not Found" appears, click [Yes] to continue installation.
 8. On the Completing the Found New Hardware Wizard screen, click the [Finish] button.

- If you are using Windows XP, the [Found New Hardware Wizard] dialog box appears.
 1. Insert the setup disc into the computer's CD-ROM drive.
 2. On the Welcome to the Found New Hardware Wizard screen, select [Install from a list or specific location (Advanced)], and then click the [Next] button.
 3. Select [Search for the best driver in these locations], and then clear the [Search removable media (floppy, CD-ROM...)] check box. Select [Include this location in the search], enter "D:\INF" (assuming that "D" is the letter assigned to your CD-ROM drive), and then click the [Next] button.
 4. Although a message appears indicating that the driver "has not passed Windows logo testing", click the [Continue Anyway] button in the [Hardware Installation] dialog box.
 5. Click the [Finish] button on the Completing the Found New Hardware Wizard screen.



Note

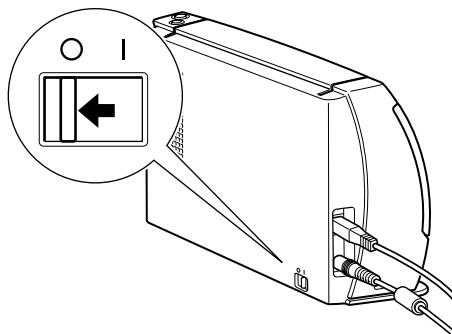
The DR-2050C is registered as "CANON DR-2050C USB" in the Imaging Device directory.

Turning the Power OFF

⚠ CAUTION

If the scanner will not be used for an extended period of time, unplug the Power Cord for safety's sake.

- 1 Exit the application.
- 2 Slide the Power Switch in the "O" direction to turn off the scanner.



IMPORTANT

- Make sure you exit the application before turning OFF the scanner. Turning OFF the scanner before exiting the application can cause unstable operation of the computer.
- Wait at least 10 seconds before turning the scanner back ON after it has been turned OFF.

⚠ WARNING

If the scanner ever makes a strange noise, emits smoke or a strange odor, becomes hot, or if the scanner does not operate at all even though the power is ON, immediately turn the scanner OFF and unplug the Power Cord. Contact your local authorized Canon dealer or service representative to have the scanner serviced.

Installing the Software



Note

The DR-2050C setup disc contains the software listed below. Be sure to read the contents of the Readme.txt file before installing the software.

- **ISIS/TWAIN Driver**

This driver allows this scanner to be used with ISIS compatible application software or TWAIN compatible application software. The driver must be installed to be able to use the scanner.

- **CapturePerfect**

CapturePerfect is software for scanning images that is ISIS compatible. You need to install the ISIS/TWAIN driver before installing CapturePerfect.

For information about installing the bundled Adobe Acrobat, see the “How To Install” file on the Adobe Acrobat setup disc.

Installing the ISIS/TWAIN Driver

The ISIS/TWAIN driver setup program installs the ISIS/TWAIN driver.
Follow the procedure below to install the ISIS/TWAIN driver.

1 Turn ON your PC. Windows starts.

IMPORTANT

- If you are using Windows 2000 Professional or Windows XP, be sure to log on as a user with administrator privileges.
- If another ISIS compatible driver is already installed in your PC, you must back up the files listed below. These files may be overwritten when you install this ISIS/TWAIN driver.
C:\Windows\System\pix*.dll
C:\Windows\PixTran*.*
- The name of the “\Windows” and “\Windows\System” folder varies, depending on which version of Windows you are using. Substitute the above folder names with the relevant folder names for Windows used in your system.

2 Insert the setup disc in the PC’s CD-ROM drive.

3 Click the [Start] button, and then select [Run].



The [Run] dialog box appears.

4 In the Open box, enter “D:\Driver\Setup.exe” (assuming that “D” is the letter assigned to your CD-ROM drive), and then click the [OK] button.



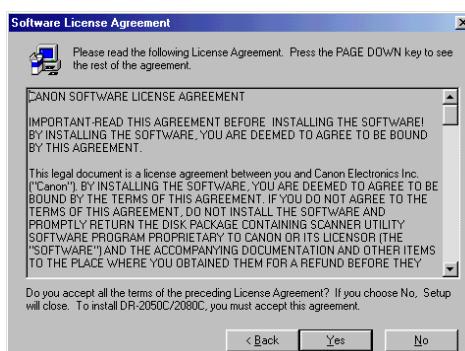
The installer starts.

5 Follow the instructions that appear on the screen to install the software.

1. Read the Welcome text, and then click [Next].



2. Read the License Agreement text, and then click [Yes].



3. Start installation of the ISIS/TWAIN driver.



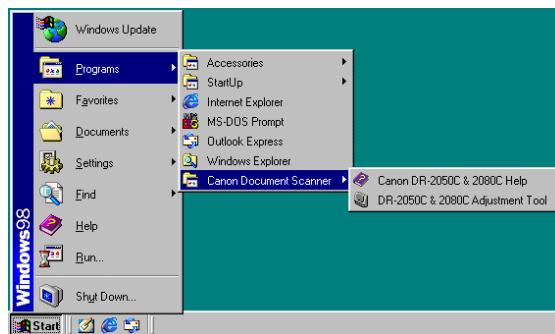
4. This completes the installation.



6 After installation is complete, click the [Finish] button to exit the installer.

Note

When the ISIS/TWAIN driver is installed, Canon DR-2050C Help (see "Using the ISIS/TWAIN Driver," on p. 36.) and the DR-2050C & 2080C Adjustment Tool (see "Adjusting the Scanner," on p. 72.) icons are registered to the Start menu.



Installing CapturePerfect

CapturePerfect is ISIS compatible application software. You need to install the ISIS/TWAIN driver before installing CapturePerfect. Follow the procedure below to install CompturePerfect.

- 1 Turn ON your PC. Windows starts.

IMPORTANT

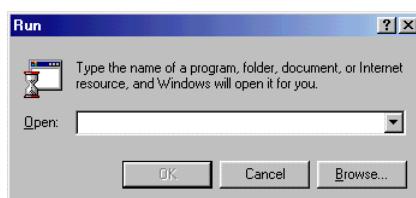
If you are using Windows 2000 Professional or Windows XP, be sure to log on as a user with administrator privileges.

- 2 Insert the setup disc in the PC's CD-ROM drive.
- 3 Click the [Start] button, and then select [Run].



The [Run] dialog box appears.

- 4 In the Open box, enter “D:\CapturePerfect\Setup.exe” (assuming that “D” is the letter assigned to your CD-ROM drive), and then click the [OK] button.



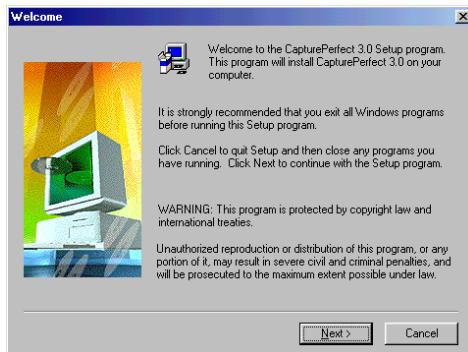
The installer starts.

5 Follow the instructions that appear on the screen to install the software.

1. Select the installation language.



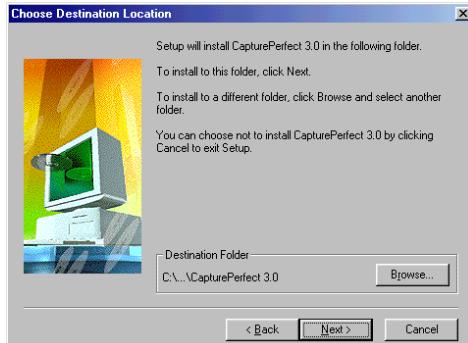
2. Read the Welcome text, and then click [Next].



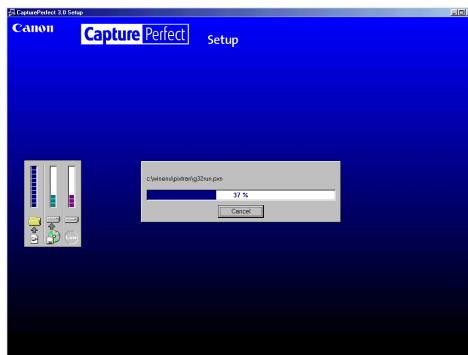
3. Read the License Agreement text, and then click [Yes].



4. Read the Choose Destination Location text, and then click [Next].



5. This starts the installer.



6. This completes the installation.



6 After installation is complete, click the [Finish] button to exit the installer.

Note

Installing CapturePerfect will put a CapturePerfect icon on your Windows Start Menu. (See "Using CapturePerfect," on p. 37.)



Uninstalling Software

Follow the procedure described below to uninstall the ISIS/TWAIN driver and CapturePerfect.

IMPORTANT

If you are using Windows 2000 Professional or Windows XP, be sure to log on as a user with administrator privileges.

- 1 Click the [Start] button, point to [Settings], and then click [Control Panel].

Note

If you are using Windows XP, on the Start menu, click [Control Panel].



The [Control Panel] window is displayed.

- 2 Double-click the [Add/Remove Programs] icon.

Note

If you are using Windows XP, double-click the [Add or Remove Programs] icon.



The [Add/Remove Programs Properties] dialog box is displayed.

Note

If you are using Windows XP, the [Add or Remove Programs] dialog box is displayed.

3 On the list in the dialog box, select the application you want to delete, and then click [Add/Remove].

Note

If you are using Windows XP, click the [Change/Remove] button.



4 The [Confirm File Deletion] dialog box appears.

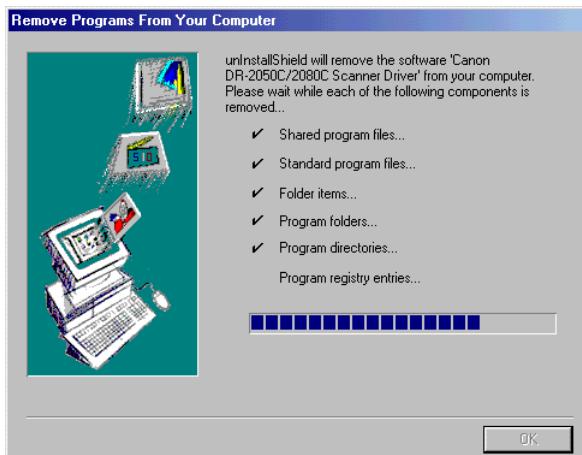


When [Canon DR-2050C/2080C Scanner Driver] is selected.



When [CapturePerfect] is selected.

5 Click the [Yes] button to start the uninstaller.



6 After uninstall is complete, click the [OK] button to exit the uninstaller.

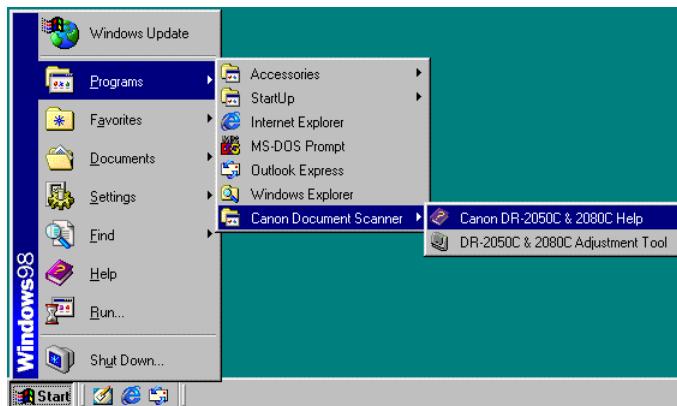
Using the Software

Note

- This section provides only the basic procedures for using installed software. Software applications also have their own help. See the applicable help for details about using each software application.
- For information about the bundled Adobe Acrobat, see Adobe Acrobat help.

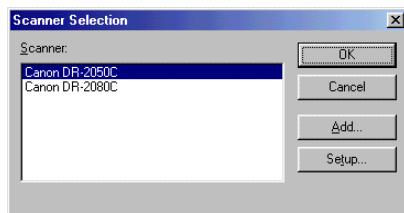
Using the ISIS/TWAIN Driver

The ISIS/TWAIN driver help describes how to use the ISIS/TWAIN driver. To access ISIS/TWAIN driver help, click the [Start] button, point to [Programs] (when using Windows XP, point to [All Programs]) - [Canon Document Scanner], and then click [Canon DR-2050C & 2080C Help], or click the [Help] button displayed in the dialog box.



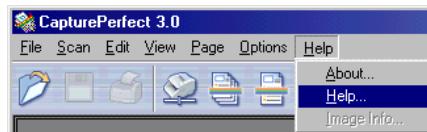
Note

Before using the ISIS/TWAIN Driver, select the scanner [Canon DR-2050C] with the software. For more information, refer to [Canon DR-2050C & 2080C Help] and the manual for the software you are using.



Using CapturePerfect

This section explains the basic procedures to start and exit CapturePerfect. Details about actually using CapturePerfect can be found in CapturePerfect help. To view information about using CapturePerfect, click [Help] on the CapturePerfect menu bar.

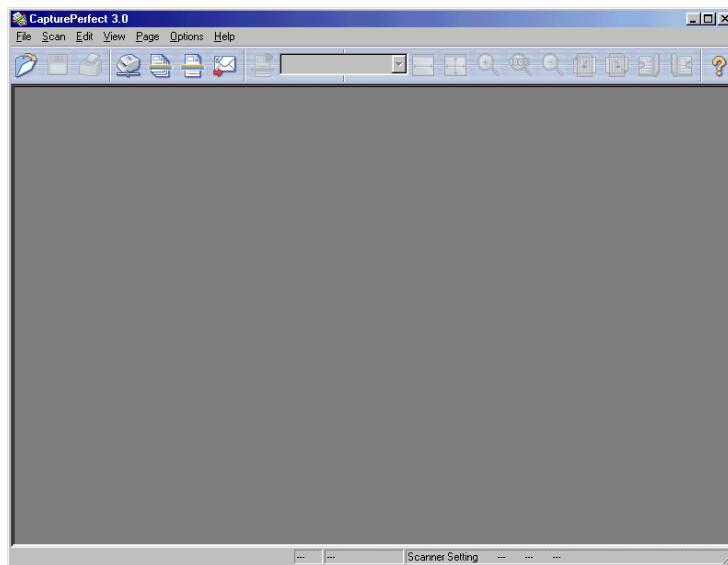


Starting CapturePerfect

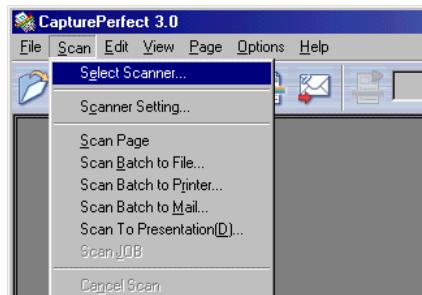
- 1 Turn ON the scanner.
- 2 Turn ON your computer. Windows starts.
- 3 Click the [Start] button, point to [Programs] (when using Windows XP, point to All Programs), and then click [CapturePerfect].



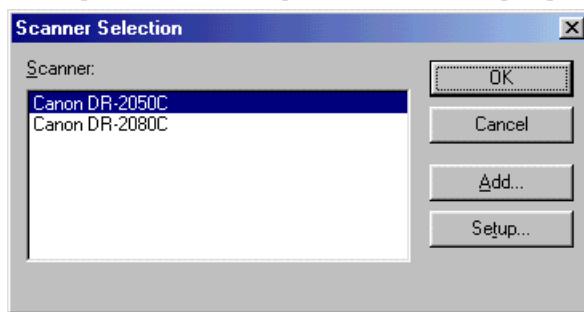
CapturePerfect starts.



4 On the [Scan] menu, click [Select Scanner].



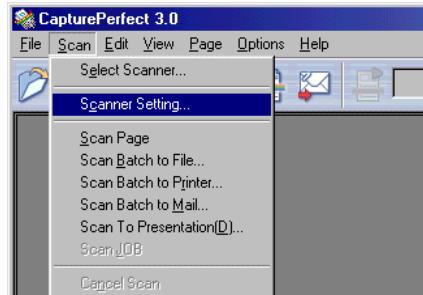
5 Select [Canon DR-2050C], and then click the [OK] button.



Note

If [Canon DR-2050C] is not displayed in the list of scanners, reinstall the ISIS/TWAIN driver. (See “Installing the ISIS/TWAIN Driver,” on p. 27.)

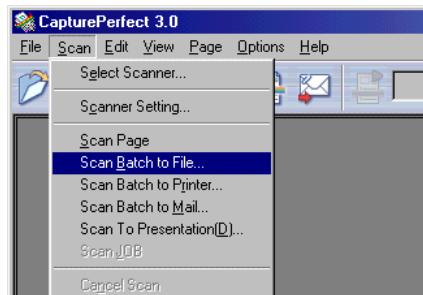
6 On the [Scan] menu, click [Scanner Setting], and then configure the scanning parameters.



 **Note**

For details about how to configure scanning parameters, see ISIS/TWAIN driver help. (See p. 36.)

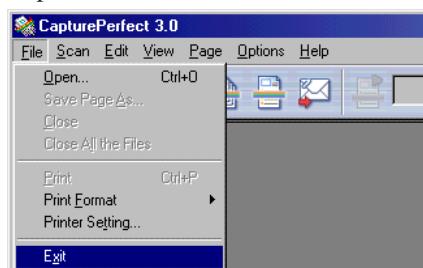
7 Execute the scan operation from the [Scan] menu.



 **Note**

Details about actually using CapturePerfect can be found in CapturePerfect help. To view information about using CapturePerfect, click [Help] on the menu bar.

8 After scanning is complete, select [Exit] on the [File] menu to quit CapturePerfect.

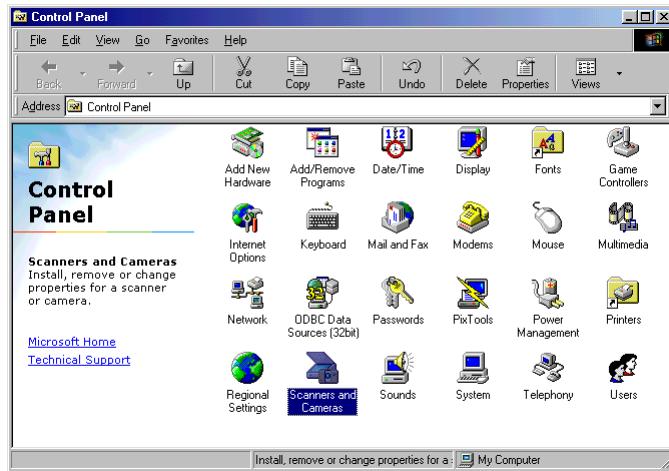


Starting CapturePerfect with the Event Function

DR-2050C and CapturePerfect support Windows Scanner Event function. By installing the ISIS/TWAIN driver and CapturePerfect, CapturePerfect starts automatically when the scanners Start Button is pressed.

Confirming Scanner Event

1. Double-click the [Scanners and Cameras] icon.

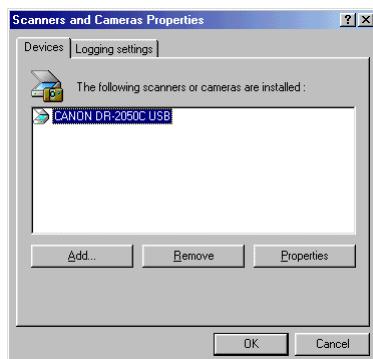


Note

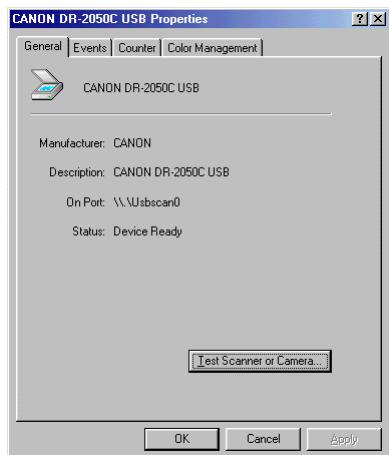
The dialog box that appears varies depending on the version of Windows being used.

- On Windows 98SE/2000 the [Scanners and Cameras Properties] dialog box appears.
- On Windows Me/XP the [Scanners and Cameras] folder opens.

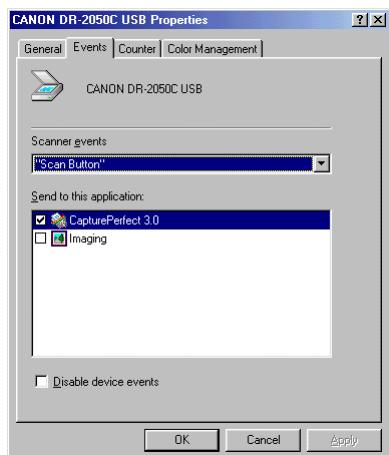
2. Select [CANON DR-2050C USB], and then click the [Properties] button to display Properties.



3. Click the [Events] tab.



4. Make sure that [CapturePerfect] is checked.



Note

- When an application is started by an event, it may not work correctly depending on the application.
- To disable the Event function, check the [Disable device events] check box.
- Restart Windows to enable new settings after changing the event settings.

Using the Scanner

Documents

This scanner can scan documents ranging in size from business cards and checks to LTR/A4 size documents. The size of documents that can be scanned is shown below.

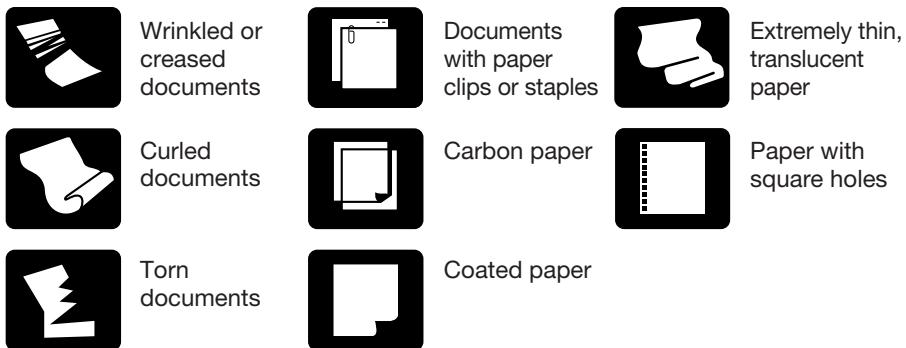
Eject Direction	Page Separation mode	Bypass mode
Width	2.16" to 8.5" (55 mm to 216 mm)	2.16" to 8.5" (55 mm to 216 mm)
Length	2.75" to 11.6" (70mm to 297 mm)	2.75" to 13.9" (70 mm to 355 mm)
Weight	14 to 32 lb bond (52 to 128g/m ²) 0.0024" to 0.0059" (0.06 mm to 0.15 mm)	11 to 40 lb bond (42 to 157g/m ²) 0.0020" to 0.0079" (0.05 mm to 0.20 mm)



IMPORTANT

A document must meet the following criteria to be scannable:

- When scanning a multipage document, pages must be grouped together so that they have the same size, thickness, and weight. Scanning different types of paper at one time can cause the scanner to jam.
- Scanning documents before the ink is dry can cause problems with the scanner. Always make sure that the ink on a document is dry before scanning it.
- Scanning documents that are written in pencil or similar material can make the rollers dirty, which can then transfer the dirt to subsequent documents. Always clean the rollers after scanning a document written in pencil.
- When scanning a double-sided document that is printed on thin paper, the image on the opposite side of each page may show through. Adjust the scanning intensity in the application software before scanning the document.
- Scanning the following types of documents can cause a paper jam or malfunction. To scan such a document, make a photocopy of the document and then scan the photocopy.

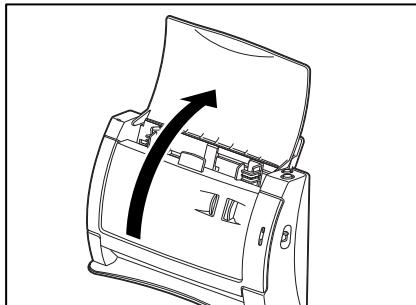


Preparing the Trays

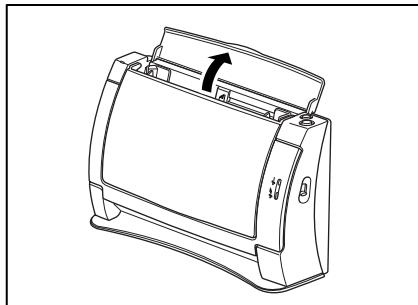
Prepare the Document Feed Tray in accordance with the document size and type.

Setting Up the Document Feed Tray

Pull the Document Feed Tray towards you to open it.



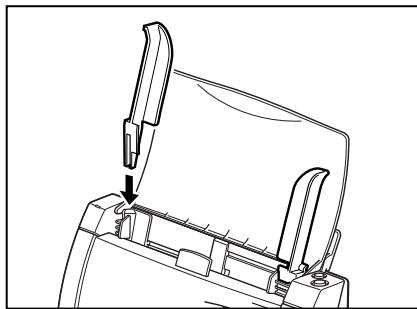
In the case of a short document, open the Upper Cover.



Using the Document Guide Adapter

When a document becomes skewed during scanning or when scanning a document that is folded in half (P. 52), install the Document Guide Adapter on the Document Guide to keep the document from becoming skewed.

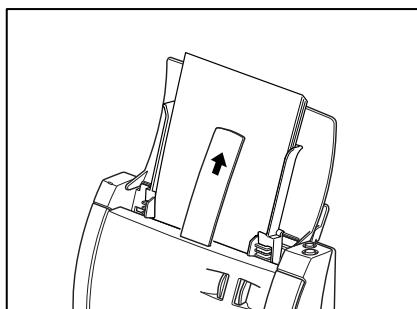
Install the Document Guide Adapter by positioning it as shown in the illustration. Insert the legs of the Document Guide Adapter as far as they go into the Document Guide.



Using the Feed Extension Plate

Under the following conditions, install the Document Guide Adapter, set the document in the scanner, and then pull out the Feed Extension Plate.

- When the document falls forward
- When the document tends to bend forward because the paper is very thin, etc.



Placing a Document for Scanning

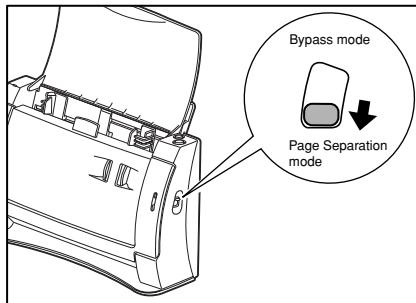
There are two methods for paper separation, called the Page Separation mode and Bypass mode for feeding documents. Feeding documents continuously from a stack of documents placed in the feed tray is called the Page Separation mode. Feeding documents one sheet at a time by hand or feeding multiple sheet documents, such as invoices that are attached at one end, is called the Bypass mode. The document feed method can be switched by moving the Feed Selection Lever.

IMPORTANT

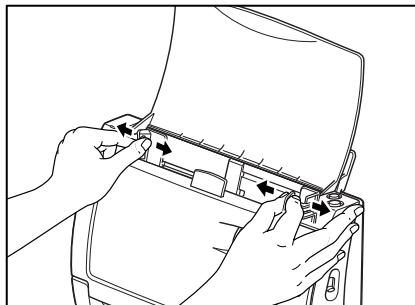
- When placing a document for scanning, be careful to remove all paper clips, staples, etc., from the document. During the scanning process, such objects can tear the document, cause a paper jam, and damage the scanner.
- Do not wear loose clothing or jewelry that may get caught in the scanner while you are operating it. If they get caught in the scanner it may cause an injury. Be extra careful of neckties and long hair. If anything gets caught in the scanner, quickly unplug the scanner to stop it.
- If the leading edge of the documents are curled, they may cause a paper jam. If the curls are large, straighten them out before scanning.

How to Feed with the Page Separation Mode

- 1 Lower the Feed Selection Lever (Page Separation mode).

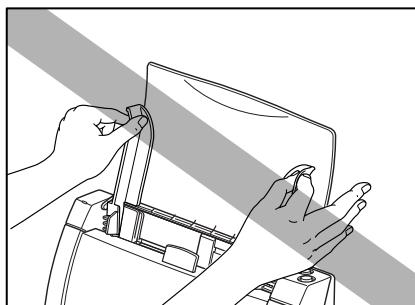


2 Adjust the Document Guide to the width of the document being scanned. In the case of an A4 or Letter size document, align the guide with the document positioning mark.

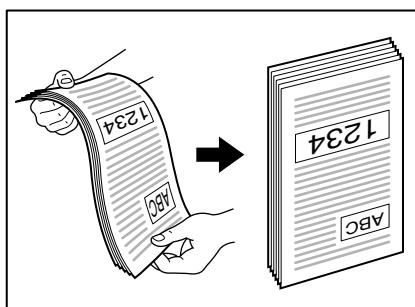


! IMPORTANT

Do not hold the tips of the Document Guide Adaptor when installing it. Doing so can damage the Document Tray.



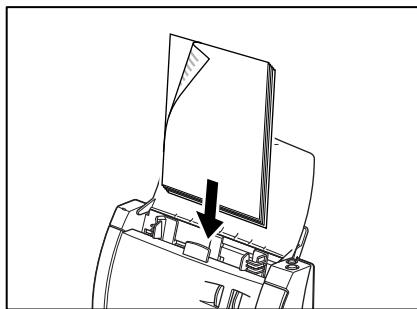
3 Fan the stack of documents to be scanned, and then angle the stack as shown in the illustration so the top edge of the first page is the lowest. (Set the document in the scanner with the top edge of the document facing downwards.)



! CAUTION

Handle the document carefully when setting it in the scanner. The edges of the paper can unexpectedly cut your hands.

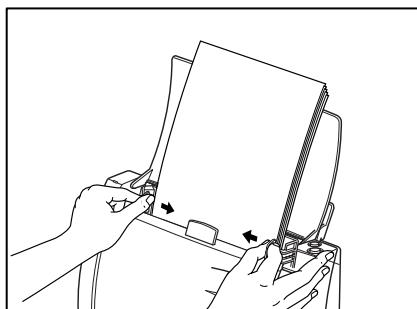
4 Set the document in the scanner with the back of the document facing forward and its top edge facing downwards.



 **IMPORTANT**

The document sheet capacity is 50 sheets of non-curved sheets. Note, however, that the capacity is less when document pages are not being fed correctly.

5 Adjust the Document Guides so they match the width of the document.



 **Note**

Before starting a scan, make sure that the document is loaded in the scanner correctly. Scanning a curved document or a creased document can damage the document.

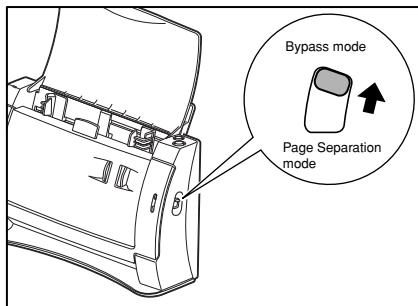
6 Start scanning from the application.

 **IMPORTANT**

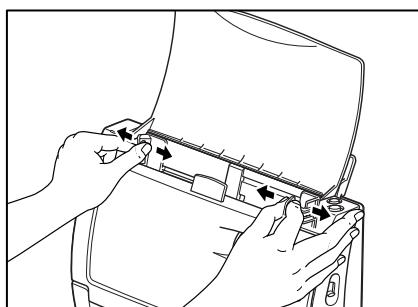
- If the paper feed operation stops due to a system error or a paper jam while the scanner is scanning, resolve the problem, make sure that the scanned image of the last page that was fed has been stored, and then resume the scanning operation.
- After you finish scanning, close the Document Feed Tray and the Upper Cover to prevent damage to the scanner while it is not being used.

How to Feed with the Bypass Mode

1 Raise the Feed Selection Lever (Bypass mode).



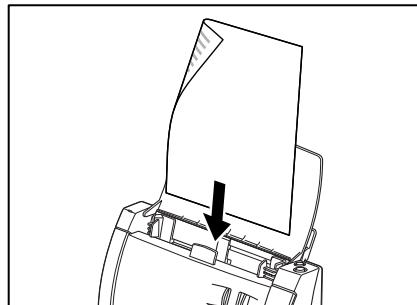
2 Adjust the Document Guide to the width of the document being scanned. In the case of an A4 or Letter size document, align the guide with the document positioning mark.



3 Start scanning from the application.

4 Set the document in the scanner with the back of the document facing forward and its top edge facing downwards.

The document is scanned as it is detected.



IMPORTANT

- When scanning documents that are fastened together, such as invoices, set the edge that is fastened together as the leading edge.
- After you finish scanning, close the Document Feed Tray and the Upper Cover to prevent damage to the scanner while it is not being used.

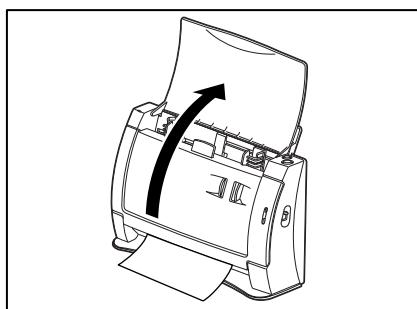
Clearing a Paper Jam

When paper jams occur during scanning, use the following procedure to clear them.

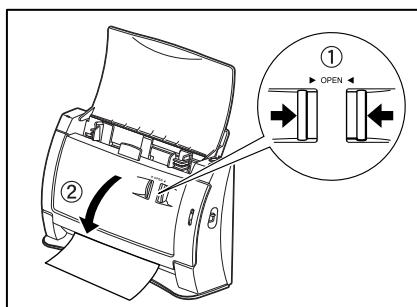
⚠ CAUTION

Be careful when removing jammed paper. It is possible to cut your hand on the edge of a sheet of paper.

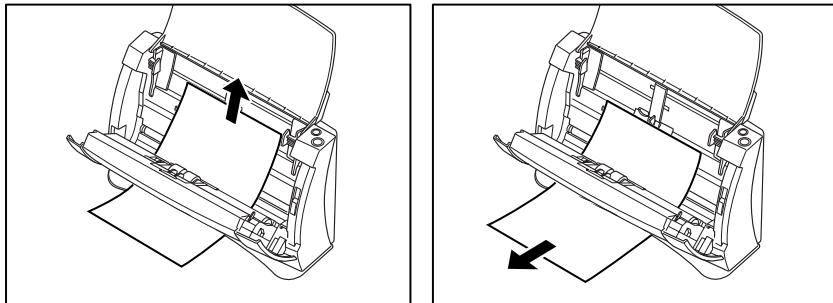
- 1 If the Document Feed Tray is closed, open it.



- 2 Pressing the OPEN Knob from both sides (①), pull the Front Unit forward to open it (②).



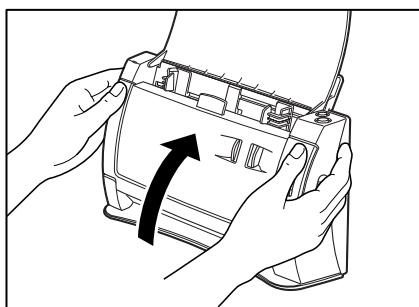
3 Remove the jammed document from the feed side or the output side.



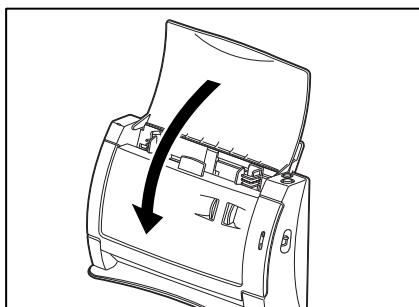
 **IMPORTANT**

Be sure to pull the document out carefully, without applying too much force. Should the document tear, be sure to remove any part remaining in the scanner.

4 Gently press the left and right sides of the top of the Front Unit. Be sure that the upper unit is completely closed by pushing on both edges with both hands until you hear a click.



5 Close the Document Feed Tray as required.



 **Note**

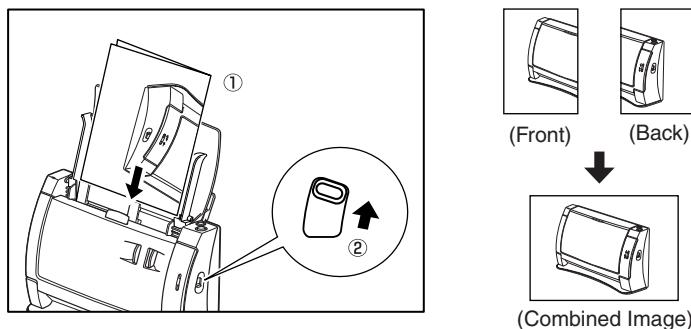
After removing the jammed paper, check to see if the last page was scanned, and then continue scanning.

Other Functions

This scanner also supports the scanning functions described below.

Scanning Folio (Folded Document)

The scanner uses a folio scanning method to scan documents that are bigger than LTR/A4 size (maximum A3 size). To do folio scanning, fold the document in half and place it on the scanner. Both sides of the folded document are scanned and combined into a single image.



IMPORTANT

- Attach the Document Guide Adaptors to prevent documents from skewing when doing folio scan. (See p. 44.)
- Use nonseparated document scanning when doing folio scan.
- Firmly set the fold in the document. The fold in the document may cause paper jams or misaligned images.



Note

- Folio scanning is set in the ISIS/TWAIN driver.
- The image on the front of the folded document appears as the right side of the image.
- Combined images can be a maximum of A3 size.
- A seam may appear where the images are combined if the document or the fold in the document is crooked.
- When scanning a document that is folded in half, position the fold on the right side (①) and raise the Feed Selection Lever (②).
- When scanning multiple documents that are folded in half, set sheets into the scanner one-by-one.

Regular Maintenance

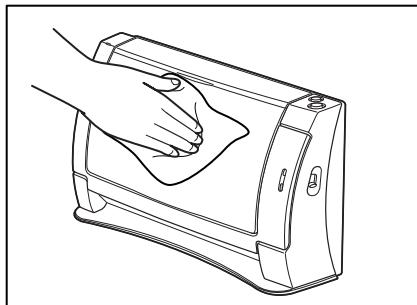
Clean the scanner on a regular basis as described below to maintain peak scanning quality.

⚠ CAUTION

- When cleaning the scanner or inside of the scanner, turn OFF the power switch and unplug the Power Cord from the outlet.
- Scanner power needs to be turned on when cleaning the metal rollers. Because of this, you need to exercise extra caution when cleaning them.
- Do not use spray type cleaners to clean the scanner. Precision mechanisms, such as the light source, may get wet, which will cause a malfunction.
- Never use paint thinner, alcohol, or other organic solvents to clean the scanner. Such solvents can damage or discolor the exterior of the scanner. They also create a risk of fire or electrical shock.

Cleaning the Scanner

To clean the front of the scanner, moisten a cloth with plain water, wring out excess water, wipe the surface and then dry it with a clean dry cloth.



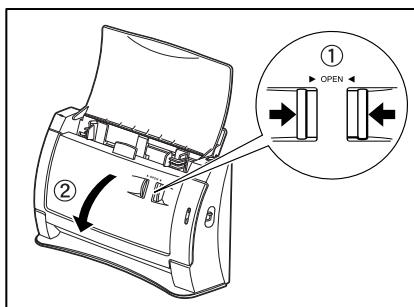
Cleaning Inside the Scanner

Dust or paper particles inside the scanner can cause lines in scanned images. Use a blower for regular cleaning of dust and paper particles from inside the scanner. After finishing a large scanning job, you should turn OFF the scanner and then clean any paper particles that are remaining.

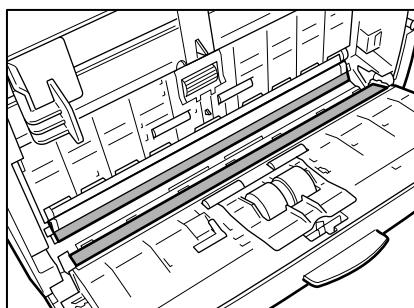
Cleaning the Sensor Glass and the Rollers

If scanned images have extraneous marks, or if the scanned documents are dirty, then the sensor glass or rollers inside the scanner may be dirty. Clean them periodically.

- 1 Open the Document Feed Tray.
- 2 Pressing the OPEN Knob from both sides (①), pull the Front Unit forward to open it (②).



- 3 Use a blower to keep the interior of the scanner free of dust and paper particles.
- 4 Use a clean dry cloth to wipe dirt off the sensor glass.
Wipe both the top and bottom sensor glasses.



! CAUTION

Do not use spray type cleaners to clean the scanner. Precision mechanisms, such as the light source, may get wet which will cause a malfunction.

! IMPORTANT

Scratches on the sensor glass may cause marks on the images and could cause feeding errors. If there are scratches on the sensor glass, contact your local authorized Canon dealer or service representative.

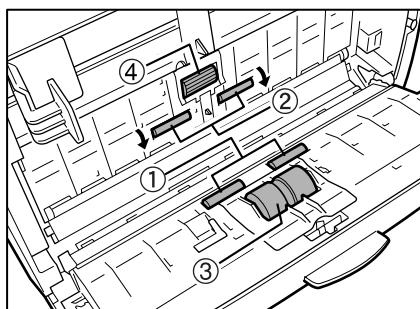
5 Rotate the rollers ① and ② as you clean them. Moisten a cloth with plain water, wring out excess water, wipe the rollers and then dry it with a clean dry cloth.

① : Rotate as you wipe.

② : Rotate in the direction of the arrows as you wipe.

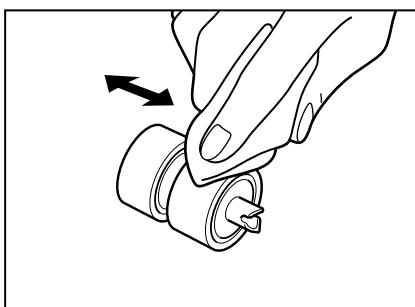
③ : (Retard Roller) Remove the roller from the scanner, wipe it clean, and then reinstall it. (See “Removing and Attaching the Retard Roller,” on p. 64.)

④ : (Feed Roller) Remove the roller from the scanner, wipe it clean, and then reinstall it. (See “Removing and Attaching the Feed Roller,” on p. 60.)



6 Remove the Feed Roller ④ and Retard Roller ③. (See p.60, p. 64.)

7 Wipe the removed rollers with a firmly wrung cloth moistened with water.

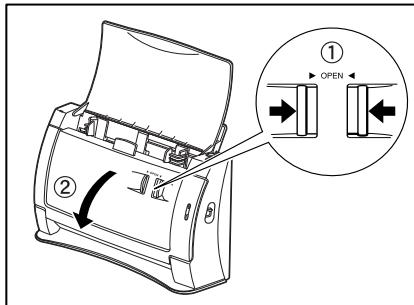


8 Attach the rollers that were removed. (See p.61, p. 65.)

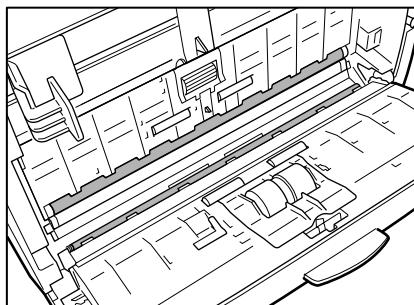
9 Carefully close the Front Unit.

Cleaning the Metal Rollers

- 1 Turn on the scanner.
- 2 Open the Document Feed Tray.
- 3 Pressing the OPEN Knob from both sides (①), pull the Front Unit forward to open it (②).



- 4 Use a clean dry cloth to wipe the metal rollers (■ parts in the illustration). Press the Start Button and Stop Button at the same time to rotate the metal rollers in small increments.



⚠ CAUTION

- There are two metal rollers, one for the Front Unit and one for the scanner. Be sure to wipe both of them. Do not spray water or neutral detergent directly on the metal rollers. Doing so can damage precision mechanisms, such as the light source. Moisture on the scanner or your hands also creates the risk of electric shock.
- Scanner power needs to be turned on when cleaning the metal rollers. Because of this, you need to exercise extra caution when cleaning them.

Removing and Attaching the Rollers

Follow the relevant procedure to remove and attach the feed roller and retard roller when you clean or replace them.

IMPORTANT

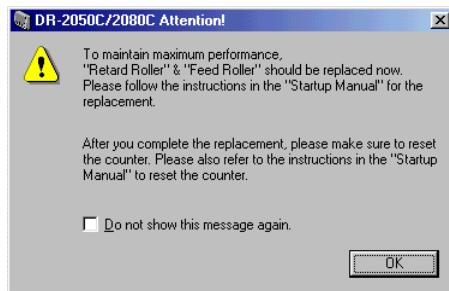
Feed rollers are consumable parts. When the rollers start to wear out, paper jams and misfeeds may occur more often. When this happens, buy an exchange roller kit, and replace the feed roller and the retard roller.

CAUTION

Do not use excessive force when removing or attaching the rollers. Doing so may damage them.

Roller Replacement Cycle

When the number of pages scanned exceeds 30,000, a roller replacement message will appear when the computer is started. Buy an exchange roller kit, and replace the feed roller and the retard roller.



IMPORTANT

- If misfeeds happen often, check the rollers for wear, and replace them if necessary before the message is displayed.
- Be sure to reset the counter after replacing the rollers. (See “Resetting the Counter,” on p. 58.)
- Contact your local authorized Canon dealer or service representative for information about the exchange roller kit (feed roller and retard roller).

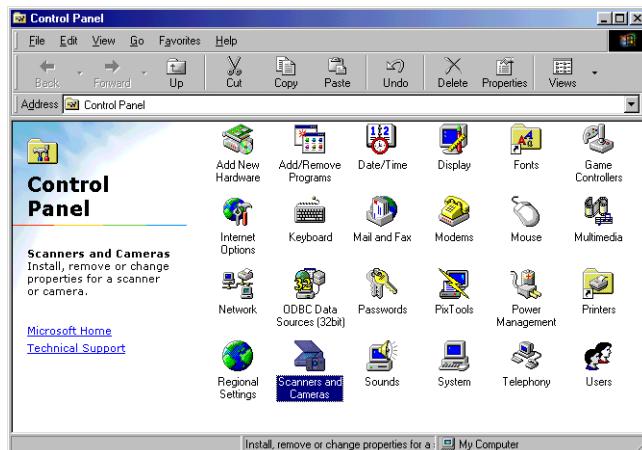
Resetting the Counter

After replacing the feed rollers, reset the counter according to the following procedure.

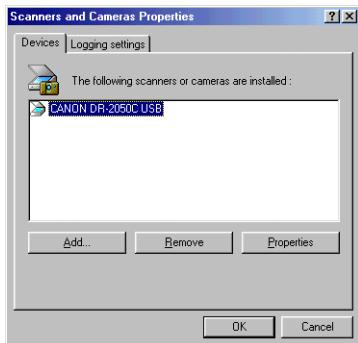
- 1 Click the [Start] button, point to [Settings], and then click [Control Panel].



- 2 Double-click the [Scanners and Cameras] icon.



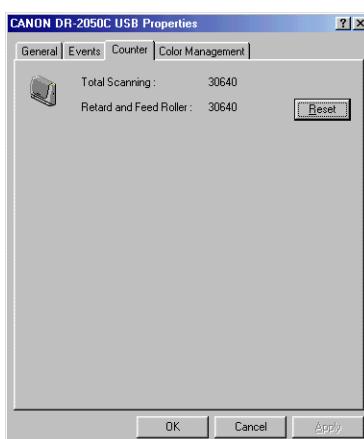
3 Click on [Properties] for the scanner you are using.



4 Click the [Counter] tab.



5 Press the [Reset] button, and then make sure that the counter for the roller being used is set to 0.



Removing and Attaching the Feed Roller

Follow the procedure below to remove and attach the feed roller for cleaning or replacement.



Note

When attaching the feed roller during installation, operate the roller fastening lever according to the removal procedure and then attach the feed roller.

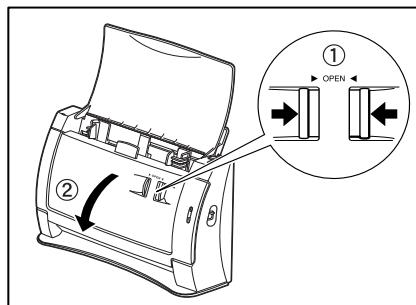


CAUTION

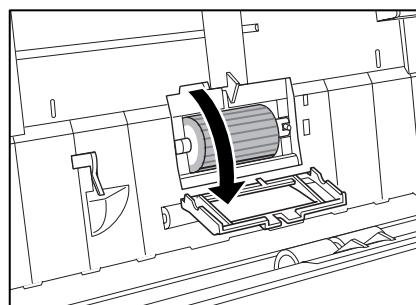
Do not use excessive force when removing or attaching the feed roller. Doing so may damage them.

Removing the Feed Roller

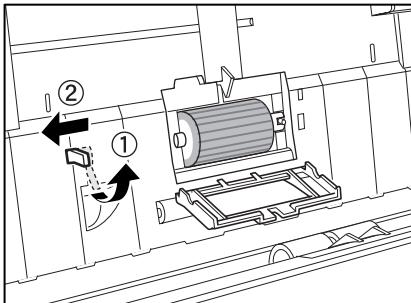
- 1 Pressing the OPEN Knob from both sides (①), pull the Front Unit forward to open it (②).



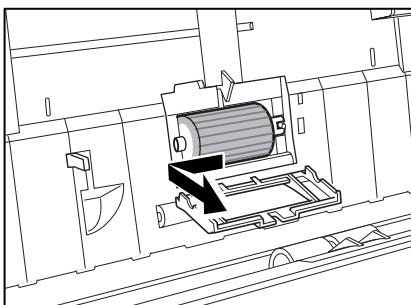
- 2 Open the roller cover on the scanner side. Insert a finger into the depression in the cover and open it.



3 Raise the roller lock lever (①), and then slide it to the left (②).

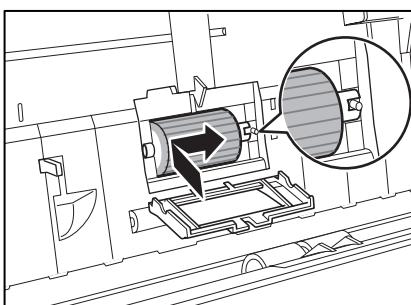


4 Shift the Feed Roller to the left to separate it from the shaft, and then remove it.

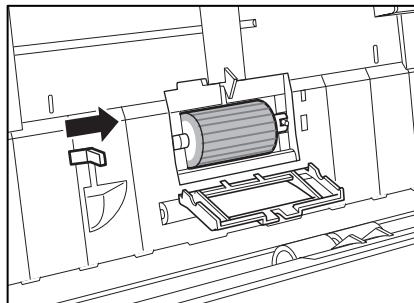


Attaching the Feed Roller

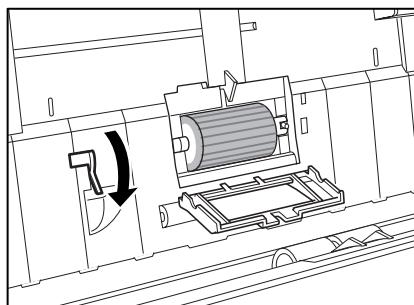
1 Set the Feed Roller into the hollow inside the roller cover, and align the notch in the roller with the scanner shaft.



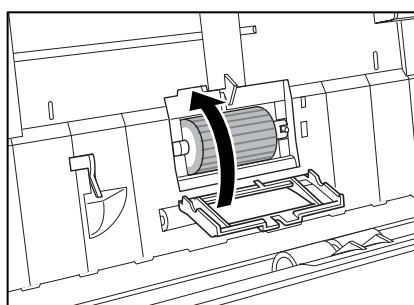
2 Slide the roller lock lever to the right, and then insert the shaft into the hole on the left side of the roller.



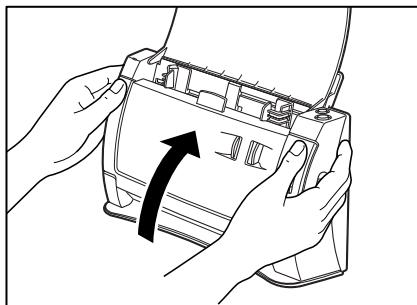
3 Lower the lever to lock the roller shaft.



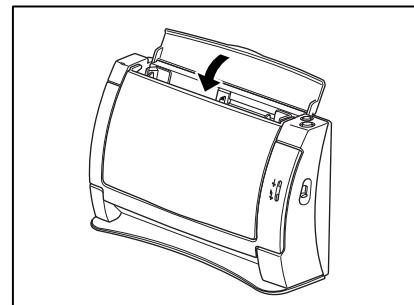
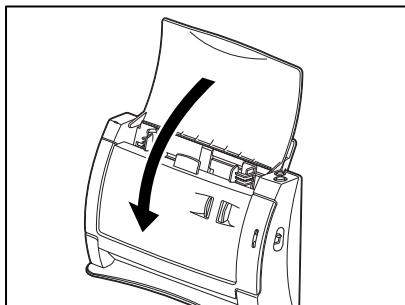
4 Close the roller cover. Return the cover fully to its original position until you hear it click into place.



5 Gently press the left and right sides of the top of the Front Unit. Return the unit fully to its original position until you hear it click into place.



6 Close the Document Feed Tray and Upper Cover.



Removing and Attaching the Retard Roller

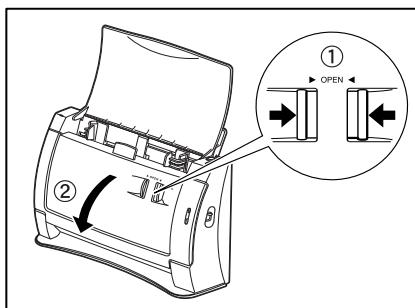
Follow the procedure below to remove and attach the retard roller for cleaning or replacement.

⚠ CAUTION

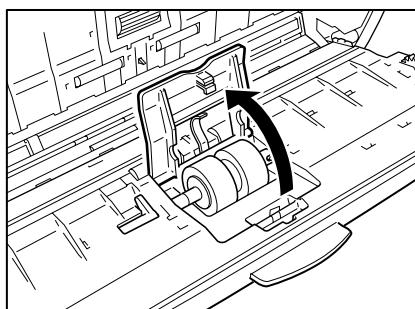
Do not use excessive force when removing or attaching the rollers. Doing so may damage them.

Removing the Retard Roller

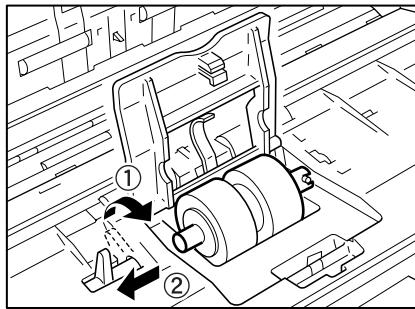
- 1 Pressing the OPEN Knob from both sides (①), pull the Front Unit forward to open it (②).



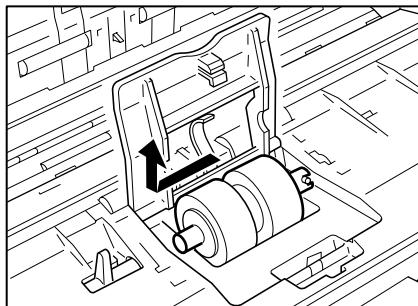
- 2 Holding the edges of the roller cover on the inside of the Front Unit, open the cover.



- 3 Raise the roller lock lever (①), and then slide it to the left (②).

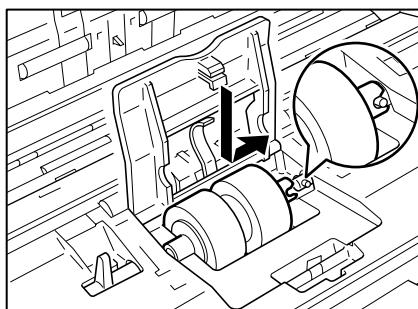


4 Shift the Retard Roller to the left to separate it from the shaft, and then remove it.

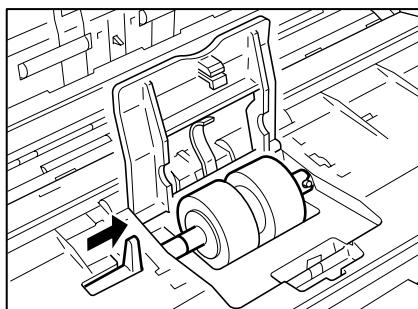


Attaching the Retard Roller

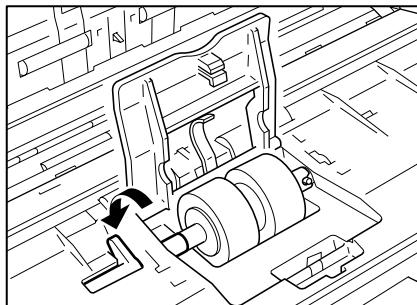
1 Position the retard roller so the notch in the roller is facing the scanner's shaft.



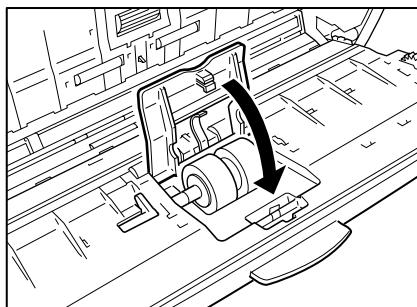
2 Slide the roller lock lever to the right, and then insert the shaft into the hole on the left side of the Retard Roller.



3 Push the roller lock lever towards the back of the scanner to lock the retard roller in place.



4 Attach the roller cover. Be sure that the upper unit is completely closed by pushing on both edges with both hands until you hear a click.



Troubleshooting

This section describes common problems that may occur while you are using the scanner, and how to resolve them.

Refer to the troubleshooting section related to the problem that you have encountered.

The Scanner Does Not Turn ON	p. 67.
The PC Does Not Recognize the Scanner	p. 68.
Scanning Is Slow	p. 68.
Images Are Not Scanned.....	p. 69.
Documents Do Not Feed Properly.....	p. 69.
Paper is not ejected correctly	p. 70.
Resulting Scanned Images Are Not Correct	p. 71.

If after consulting the above section you still cannot resolve the problem, contact your local authorized Canon dealer or your service representative.

The Scanner Does Not Turn ON

Check the following:

- Is the power switch in the ON position? (See p. 22.)
- Is the Power Cord connected securely? (See P. 20.)
- Is the Power Cord plugged into an outlet? (See p. 20.)

The PC Does Not Recognize the Scanner

The following are possible causes of the PC failing to recognize the scanner. Check each possible cause.

Cause	The scanner is not connected correctly.
Remedy	Check the USB cable connections between the scanner and the PC. (See p. 21.)
Cause	The USB 2.0 interface card is not inserted in the PC correctly.
Remedy	Reseat the USB 2.0 interface card in the PC correctly, referring to the instruction manual for the USB 2.0 interface card. Also, confirm whether the USB interface card is recognized by the operating system you are using.
Cause	The scanner is not ON.
Remedy	Refer to "The Scanner Does Not Turn On," on p. 67 and make sure that the scanner is turned ON. If the scanner is not turned ON, turn it ON. (See p. 22.)
Cause	The USB 2.0 interface card does not support the scanner.
Remedy	Use the recommended USB 2.0 interface card. (See p. 19.)
Cause	The scanner does not support the USB cable.
Remedy	Use the USB cable provided with the scanner. (See p. 21.)
Cause	The scanner does not support the USB HUB.
Remedy	Remove the USB HUB to use the scanner. (See p. 21.)

Scanning Is Slow

The following problems might cause the scanner to be slow. Try the solutions according to the problem.

Cause	The USB 2.0 interface card does not support Hi-Speed 2.0.
Remedy	Use the recommended USB 2.0 interface card. (See p. 19.)
Cause	The USB 2.0 interface cable does not support Hi-Speed 2.0.
Remedy	Use the USB cable provided with the scanner. (See p. 21.)
Cause	The USB HUB does not support Hi-Speed 2.0.
Remedy	Remove the HUB or replace it with one that supports HI-Speed 2.0. (See p. 21.)

Images Are Not Scanned

Check the following if the scanner does not scan an image even though the scanning operation is being performed:

- Is the scanner correctly connected to the PC?
- Has the scanner driver been installed?
- Has the application software been installed correctly? Has the application software been set up correctly?
- Is there a problem in the PC system?



IMPORTANT

- When system errors result in the scanner not functioning at all, turn OFF the scanner and wait at least ten seconds before turning it back ON. If an error continues to occur, restart the computer.
- Make sure that the last document scanned was scanned correctly when scanning continues.

Documents Do Not Feed Properly

The following are possible causes of a document failing to feed properly.

Check each possible cause.

Cause	Attempting to scan a document of a size, thickness, or weight that the scanner cannot scan.
Remedy	Check the size, thickness, and weight of the document. For precautions concerning documents, see "Documents," on p. 42.
Cause	The rollers inside the scanner are dirty or worn.
Remedy	Refer to page 54 and clean the rollers. If the rollers are worn, then they need to be replaced. Contact your local authorized Canon dealer or service representative to purchase a roller replacement kit.

For details on how to clear jammed paper, see "Clearing a Paper Jam," on p. 50.

Paper is not ejected correctly

When you are performing page-by-page scanning while a multi-page document is set in the scanner, scanning pauses with the trailing edge of the scanned sheet being engaged by the eject roller.

Cause	Under these conditions, the scanner enters a standby state and pauses for the next sheet. It does not indicate a paper jam.
Remedy	To scan the next sheet of the document, manually remove the page that is engaged by the eject roller, or just start the next scan job.

For details on how to clear jammed paper, see “Clearing a Paper Jam,” on p. 50.

Resulting Scanned Images Are Not Correct

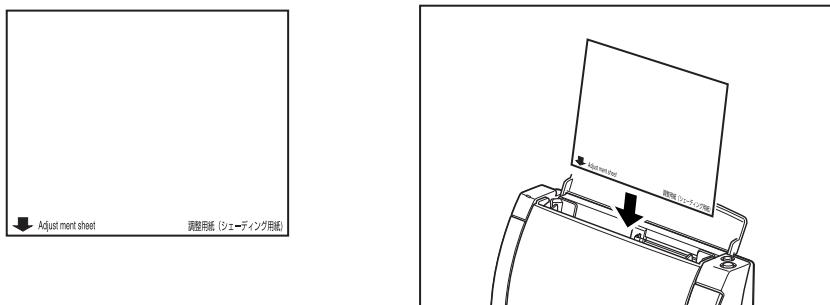
If the resulting scanned images are not crisp, if there are lines or spots on the images, or if there is some other problem with scanned images, likely causes are listed below. Check each item and take the appropriate action.

Cause	The sensor glass or the rollers inside the scanner are dirty.
Remedy	Clean the sensor glass and rollers as described on p. 54.
Cause	The scanner's internal platen glass is scratched.
Remedy	Contact your local authorized Canon dealer or service representative.
Cause	The application software is not set up properly for scanning.
Remedy	Check the scanning related settings, such as brightness in the application software. For example, if the document cannot be scanned at all, it is possible that the brightness setting is too high. If the resulting scanned images are too dark, it is possible that the brightness setting is too low.
Cause	The scanner driver or application software is not running normally.
Remedy	If the software is set properly for scanning and scanning is still not possible, it is possible that the scanner driver or the application software is not running normally. Reinstall the scanning driver or the application software. For details on how to install the scanner driver, see "Installing the ISIS/TWAIN Driver," on p. 27. For details on how to install the application software, refer to the application software instruction manual.
Cause	Attempting to use a function of the DR-2050C that is not supported by the application software.
Remedy	Certain application software may not support auto page size detection or other functions. You may experience abnormal scanning results when scanning with such an application. If this happens, try scanning again after turning off auto paper size detection, etc.

If you continue to have problems with the scanned image after trying the above countermeasures, try using the following procedure to adjust the scanner.

Adjusting the Scanner

To adjust the scanner, set the supplied Adjustment Sheet (Shading Sheet) in the scanner. Orient the adjusting sheet in the direction indicated by the arrow when setting it in the scanner. After setting the Adjustment Sheet in the scanner, click the Windows Start button and then click Programs (All Programs in the case of WindowsXP), Canon Document Scanner, and then DR-2050C & 2080C Adjustment Tool, or use the scanner adjustment function of the ISIS/TWAIN driver. Follow the instructions on the dialog box that appears on the screen to adjust the scanner. Refer to Help for the ISIS/TWAIN Driver for information about the ISIS/TWAIN Driver scanner adjustment.



⚠ CAUTION

Before performing scanner adjustment, be sure to clean the sensor glass (see P. 54). Attempting to perform scanner adjustment while the sensor glass is dirty can cause vertical lines in the scanned image. Note that performing scanner adjustment will cause previous adjustment data to be deleted. Once deleted, adjustment data cannot be recovered.

Specifications

Type	Counter Top Image Scanner		
Scanning Document Specifications			
Width:	2.16" to 8.50"	(55 mm to 216 mm)	
Length:	2.75" to 11.6" (70 mm to 297 mm)		
(separated documents)	2.75" to 13.9" (70 mm to 355 mm)		
(nonseparated documents)			
Weight:	14 to 32 lb bond (0.0024" to 0.0059")		
(separated documents)	52 to 128 g/m ² (0.06 mm to 0.15 mm)		
(nonseparated documents)	11 to 40 lb bond (0.0020"" to 0.0079")		
	42 to 157 g/m ² (0.05 mm to 0.20 mm)		
Document Feeding Method	Automatic		
Scanning Method	Contact image sensor		
Light Source	LED		
Scanning Side	Simplex/Duplex		
Scanning Modes	Black and white, Advanced text enhancement, Error diffusion, 256-level grayscale, 24 bit color		
Scanning Resolution (Primary Scan Lines x Secondary Scan Lines)	100 x 100 dpi, 150 x 150 dpi, 200 x 200 dpi 240 x 240 dpi, 300 x 300 dpi, 400 x 400 dpi 600 x 600 dpi		
Scanning Speed (Conditions: CPU Celeron 733 MHz; 256 MB RAM; Document Size: A4)			
Black and White	Simplex		
	200 x 200 dpi	20 pages/minute	
	300 x 300 dpi	11 pages/minute	
Duplex			
	200 x 200 dpi	38 images/minute	
	300 x 300 dpi	20 images/minute	
256-level Gray	Simplex		
	200 x 200 dpi	20 pages/minute	
	300 x 300 dpi	11 pages/minute	
Duplex			
	200 x 200 dpi	38 images/minute	
	300 x 300 dpi	20 images/minute	
24-bit Color	Simplex		
	100 x 100 dpi	18 pages/minute	
	200 x 200 dpi	7 pages/minute	
Duplex			
	100 x 100 dpi	36 images/minute	
	200 x 200 dpi	12 images/minute	

Interface	Hi-Speed USB 2.0
Other Functions	Auto document thickness adjustment, folio scan
Dimensions	11.7" x 7.7" x 3.9" (W x H x D) 298 mm x 197 mm x 100 mm (W x H x D)
Dimensions (with trays open)	11.7" x 12.7" x 5.2" (W x H x D) 298 mm x 323 mm x 132 mm (W x H x D)
Weight	Approximately 5.0 lb (2.5 kg) (Excluding the AC adaptor)
Power Supply	DC16V 0.8A
Power Consumption	Scanning: 13 W maximum Standby: 4 W Power SW OFF: 0.4 W
Noise	Not more than 66 dB
Operating Environment	Temperature: 10°C to 32.5°C (50°F to 90.5°F) Humidity: 20% to 80% RH

AC Adaptor (100 - 240V)

Model	MG1-3607
Input	AC 100-240V 50/60Hz 0.65-0.34A
Output	DC16V 1.8A
Power Supply	0.5 W max. (separate AC adaptor)
Weight	Approximately 0.7 lb (0.3 kg) (including Power Cord)

Replacement Parts

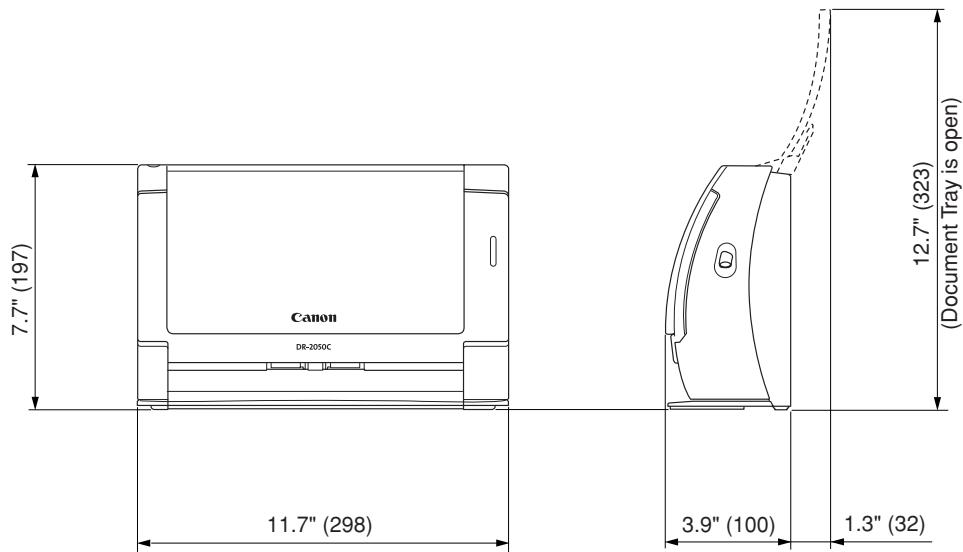
Roller replacement kit (product code: 7982A001)

Kit to replace the feed rollers (feed roller and retard roller).

- Refer to “Removing and Attaching the Rollers,” on p. 65 for information about replacing the rollers.
- Contact your local authorized Canon dealer or service representative for detailed information about the replacement parts.
- Specifications are subject to change without notice.

External Dimensions

Units: inches (units in parentheses are millimeters)



Index

A

AC adapter 5
Adjustment Sheet 72
Adobe Acrobat 36

B

Bypass mode 48

C

CapturePerfect 30
 Uninstall 33
 Install 30
 Event Function 40
 Using 36
Checking the Packing List 10
Cleaning
 Inside 53
 Scanner 53
 Glass 54

D

Document Eject Opening 14
Document Feed Opening 14
Document Feed Tray 14
Document Guide 14
Document Positioning Mark 15, 46, 48
Documents 42

F

Features 8
Feed Extension Plate 14
Feed Indicator 14
Feed Selection Lever 14

I

ISIS/TWAIN Driver 36
 Uninstall 33
 Install 27
 Using 36
 OPEN Knob 14
 Interface Cards 19
 Upper Cover 14

N

Names and Functions of Parts 14
Notes Concerning Disposal 7
Notes on Normal Handling 6

O

Operating Environment 74

P

Page Separation mode 45
Paper Jam 50
Placing a Document for Scanning 45
Power Connector 15
Power Indicator 14
Power Switch 15

R

Regular Maintenance 53
Retard Roller 57
Roller 57
 Resetting the Counter 58
 Replacement Cycle 57
Roller Unit 57

S

Scanner
 Preparation 43
 Installation Procedure 18
 Recognizing 23
Scanning Folio (Folded Document) 52
Shading Sheet 72
Specifications 73
 AC Adaptor 74
 External Dimensions 75
 Replacement parts 74
 Scanner 73
Start Button 14
Stop Button 14

T

Troubleshooting 67

V

Ventilation Openings 15

MEMO

MEMO

FCC REGULATIONS (For 120 V model)

Document Scanner, Model M11055

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A. Inc.

One Canon Plaza, Lake Success NY 11042, U.S.A.

Tel. No. (516)328-5600

RADIO INTERFERENCE REGULATIONS (For 120 V models)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Industry Canada.

RÈGLEMENT SUR LE BROUILLAGE RADIOÉLECTRIQUE (For 120 V models)

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par l'Industrie Canada.

Für EMVG

Dieses Produkt ist zum Gebrauch im Wohnbereich, Geschäfts- und Gewerbebereich sowie in Kleinbetrieben vorgesehen.

Für 3. GSGV

Maschinenlärminformationsverordnung 3. GSGV, 18.01.1991: Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäß EN 27779.

MODEL NAMES

Model DR-2050C is identical to model M11055.

Canon

CANON ELECTRONICS INC.

1248, SHIMOKAGEMORI, CHICHIBU-SHI, SAITAMA 369-1892, JAPAN

CANON U.S.A. INC.

ONE CANON PLAZA, LAKE SUCCESS, N.Y. 11042, U.S.A.

CANON CANADA INC.

6390 DIXIE ROAD, MISSISSAUGA, ONTARIO L5T 1P7, CANADA

CANON EUROPA N.V.

BOVENKERKERWEG 59-61, P.O.BOX 2262, 1180 EG AMSTELVEEN, THE NETHERLANDS

CANON LATIN AMERICA, INC.

703 WATERFORD WAY, SUITE 400 MIAMI, FLORIDA 33126, U.S.A.

CANON AUSTRALIA PTY. LTD.

1 THOMAS HOLT DRIVE, NORTH RYDE, SYDNEY. N.S.W, 2113. AUSTRALIA

CANON SINGAPORE PTE. LTD.

1 HARBOUR FRONT AVENUE #04-01, KEPPEL BAY TOWER, SINGAPORE 098632

CANON HONGKONG COMPANY LTD.

19TH FLOOR, THE METROPOLIS TOWER, 10 METROPOLIS DRIVE, HUNGKONG, KOWLOON, HONG KONG.



CE-IE-464